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An Occupational Profile of Selected Manufacturing Industries in Massachusetts 1986

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Department of Employment and Training

An Occupational Profile of Selected Manufacturing Industries in Massachusetts 1986

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November, 1988

FOREWORD

The Occupational Employment Statistics Program is part of a Federal-State cooperative program involving State Employment Security Agencies (SESA's) as well as the Employment and Training Administration (ETA) and the Bureau of Labor Statistics (BLS). It was designed to meet the needs of economists, employment specialists, educators, counselors and others for current data on employment by occupations as well as projected data on employment by occupation and industry.

This publication is the twenty-second in a series on current Occupational Profiles of Massachusetts Industries. The information is used in updating the industry-occupation matrix and as a data base for projecting future employment trends. Copies of all previous survey publications are available for reference in our Research Library.

Our sincere appreciation is extended to the many employers who participated in this survey, without whose support this labor market information would not be available. Acknowledgement for support is also made to the U.S. Department of Labor and in particular to the Bureau of Labor Statistics - both on national and regional levels - for their technical support. We also wish to recognize the contribution of the data processing department and to Eunice King for her patience in typing this report.

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METHODOLOGY

The Sample

The second quarter 1986 report (ES-202) of employment and wages covered by the Massachusetts Employment Security Law was used as a sampling frame for the Occupational Employment Statistics survey of manufacturing establishments.

The sampling frame was stratified by three-digit SIC's (Standard Industrial Classification) and by nine employment size classes. Establishments with less than four employees were excluded from the sample and all units with employment of two hundred and fifty or more were automatically included. All other establishments were subject to sample selection on a random basis, with the units in larger size classes having a proportionately higher chance of selection. Each unit was given a weight according to the proportion of firms selected in each size class. The sample included 2,997 establishments with benchmark employment of 665,110.

The Survey and Responses

Each establishment was mailed a survey schedule; telephone calls and personal visits were made where the date was critical for calculating valid estimates. As many as three follow-up schedules were mailed to nonrespondents. Of the 2,997 establishments in the survey, replies were received from 2,758 or 92.0 percent. After manual editing and mechanical (computer) screening, 2,500 responses with total employment of 513,200 were determined useable, 83.4 percent of sample establishments.

The Estimating Procedure

All useable responses were stratified into seven size groups, by industry. Reported total employment (or the summed occupational employment) from each useable response was multiplied by the weight assigned during sample selection. These industry data were then divided into the employment in the ES-202 report for the reference month of the survey (stratified by corresponding size class cells). The result produced by the procedure is known as the benchmark factor. This factor was then applied to the occupational data, thus accounting for nonresponse. These occupational estimates were then summed across size classes to industry totals.

Sampling Error

Sampling error is an arithmetic measure of the precision of the estimate. It is the difference between the estimate computed from the sample and the result that would have been obtained if the same methods were used to collect identical information from the universe. The relative errors listed in this report are the sampling errors of each occupation expressed as a percent of that occupational estimate. The relative errors shown are such that the chances are 2 out of 3 that the results of collecting identical information from the entire population would not differ by more than the percent of relative error shown; the chances are 19 out of 20 that the results of collecting identical information from the entire population would not differ by more than twice the percent shown. For example, it is estimated in this report that there are 380 secretaries employed in SIC 20, Food and Kindred Products, making up 1.67 percent of total employment in the industry.

Thus, the chances are about 68 out of 100 that the results of comparable full scale data collection would differ by less than 60 (15.7 percent) from the 380 estimated; similarly, the estimated 1.67 percent of total employment would differ by less than 0.26 percent of total employment.

Nonsampling Error

The results of this survey are subject to biases and other nonsampling errors. Although careful editing and screening steps were taken, responding establishments may account for some errors in computations and processing, as well as placing workers in a wrong occupation. The nonrespondents are a source of nonsampling error for which measures are not available but are reflected in the estimating procedure.

SCOPE OF SURVEY

This survey covers all Standard Industrial Classifications in the Manufacturing Division of the 1972 Manual. For your convenience, listed below are the two-digit SIC Codes with their short titles. Additionally, a composite of manufacturing industries which make up the "High Technology Industries" grouping has been included. SIC Codes included within "High Industry Technology Industries" are listed on page 17.

SIC Code	Short Titles
20	Food and Kindred Products
21*	Tobacco Manufacturing
22	Textile Mill Products
23	Apparel and Other Textile Products
24	Lumber and Wood Products
25	Furniture and Fixtures
26	Paper and Allied Products
27	Printing, Publishing & Allied Industries
28	Chemical and Allied Products
29*	Petroleum and Coal Products
30	Rubber & Miscellaneous Plastic Products
31	Leather and Leather Products
32	Stone, Clay, and Glass Products
33	Primary Metal Industries
34	Fabricated Metals
35	Machinery except Electrical
36	Electrical Equipment and Supplies
37*	Transportation Equipment
38	Instruments and Related Products
39	Miscellaneous Manufacturers

Based on 1972 SIC codes

* Survey data not publishable

Manufacturing Employment 1983-1986*

Total manufacturing employment declined slightly by 14,600 jobs or 2.3 percent over the 1983-1986 time frame. Employment expanded by 38,600 between 1983 and 1984 only to drop 53,200 the following two years.

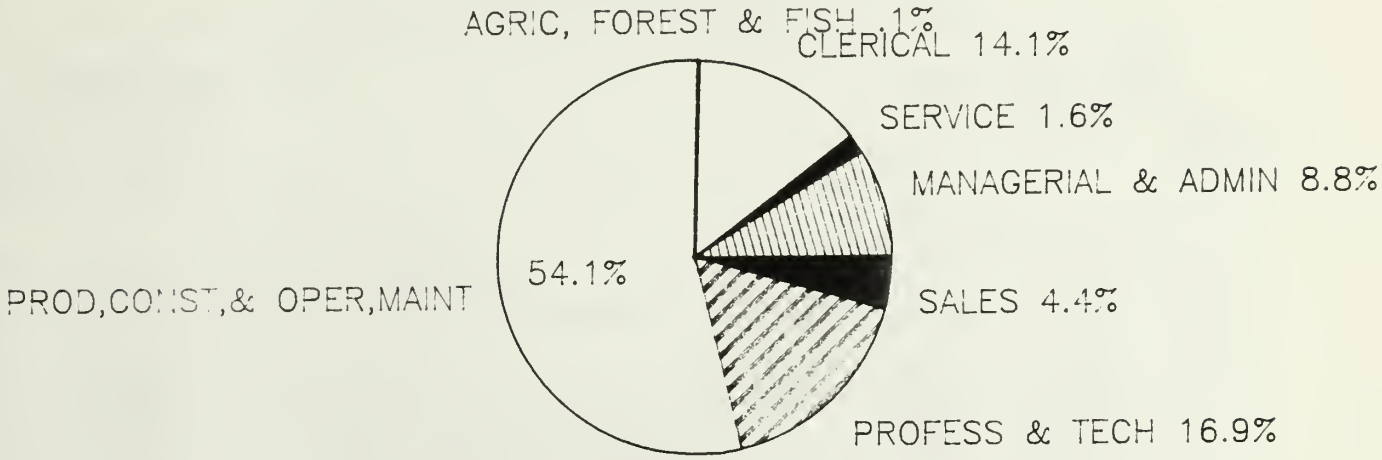
The durable goods sector of manufacturing employment remained virtually unchanged over the 1983-1986 time frame. Although within the durable goods sector, any given industry may have increased or decreased its absolute employment, discussion of these changes will occur in the detailed industry descriptions which follow.

The nondurable goods sector of manufacturing employment experienced a drop of 14,400 jobs or 6.6 percent over the 1983-1986 time frame. Within nondurables, the apparel industry lost 8,100 jobs or approximately 56 percent of the nondurable goods employment loss. The leather products industry essentially accounted for the remainder of the job loss within nondurable goods (dropping by 6,700 or 40 percent) over the same 1983-1986 time frame.

*Source: Massachusetts Current Employment Statistics (CES) Program

MANUFACTURING TOTAL

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Assemblers, Fabricators-except Machine, Electrical, Electronic	26810
2.	Electrical and Electronic Engineers	18590
3.	All Other Helpers, Laborers, Material Movers	17200
4.	First Line Supervisors - Production, Operating Workers	16390
5.	Secretaries	15570
6.	General Managers and Top Executives	14870
7.	Machinists	13090
8.	Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers	12870
9.	Sewing Machine Operator, Garment	11350
10.	Hand Packers and Packages	10280

OCCUPATIONS OF EMPLOYEES
MANUFACTURING TOTAL
SIC = 201 - 399
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	617770	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	54400	8.81	N/A
FINANCIAL MANAGERS	5550	0.90	15.10
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	2220	0.36	13.53
PURCHASING MANAGERS	1680	0.27	16.39
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	5610	0.91	17.06
ADMINISTRATIVE SERVICES MANAGERS	1400	0.23	21.33
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	7440	1.20	11.74
INDUSTRIAL PRODUCTION MANAGERS	9460	1.53	14.30
GENERAL MANAGERS AND TOP EXECUTIVES	14870	2.41	13.91
ALL OTHER MANAGERS AND ADMINISTRATORS	6170	1.00	23.11
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	104640	16.94	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	4020	0.65	16.30
BUDGET ANALYSTS	1240	0.20	13.37
ALL OTHER FINANCIAL SPECIALISTS	1810	0.29	N/A
PURCHASING AGENTS AND BUYERS, FARM PRODUCTS	20	N/A	30.43
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	3570	0.58	15.53
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	2570	0.42	14.54
COST ESTIMATORS	1680	0.27	27.06
COMPLIANCE OFFICERS & ENFORCEMENT INSPECTORS	10	N/A	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	7420	1.20	17.70
AERONAUTICAL AND ASTRONAUTICAL ENGINEERS	470	0.08	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	230	0.04	15.93
CHEMICAL ENGINEERS	970	0.16	22.61
CIVIL ENGINEERS, INCLUDING TRAFFIC	50	0.01	34.62
ELECTRICAL AND ELECTRONIC ENGINEERS	18590	3.01	10.03
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	3770	0.61	16.38
SAFETY ENGINEERS, EXCEPT MINING	150	0.02	22.00
MECHANICAL ENGINEERS	7600	1.23	10.78
ALL OTHER ENGINEERS	3290	0.53	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	30	N/A	12.50
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	8950	1.45	13.76
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	1170	0.19	23.12
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	2360	0.38	19.75
DRAFTERS	4060	0.66	17.57
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	3310	0.54	20.06
PHYSICAL SCIENTISTS	200	0.03	6.86

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MANUFACTURING TOTAL
SIC = 201-399
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PHYSICISTS AND ASTRONOMERS	80	0.01	24.39
CHEMISTS, EXCEEPT BIOCHEMISTS	1110	0.18	20.52
ALL OTHER PHYSICAL SCIENTISTS	40	0.01	20.00
LIFE SCIENTISTS	130	0.02	39.69
BIOLOGICAL SCIENTISTS	110	0.02	39.64
MEDICAL SCIENTISTS	20	N/A	N/A
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	110	0.02	7.62
BIOLOGICAL,AGRIC,FOOD TECHNOL,EXC.HEALTH	180	0.03	26.37
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	1580	0.26	27.15
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	70	0.01	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	5410	0.88	13.11
COMPUTER PROGRAMMERS	3500	0.57	25.31
COMPUTER PROGRAMMER AIDES	710	0.11	23.23
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	450	0.07	32.37
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	330	0.05	20.12
MATHEMATICAL SCIENTISTS	40	0.01	39.47
LAWYERS	90	0.01	14.77
LIBRARIANS, PROFESSIONAL	80	0.01	17.11
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	330	0.05	6.44
REGISTERED NURSES	10	N/A	N/A
OPTICIANS, DISPENSING AND MEASURING	60	0.01	21.67
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	70	0.01	11.59
WRITERS AND EDITORS	2710	0.44	12.43
TECHNICAL WRITERS	1030	0.17	18.60
PUBLIC REL. SPECIALISTS & PUBLICITY WRITERS	50	0.01	23.08
REPORTERS AND CORRESPONDENTS	1570	0.25	12.36
PHOTOGRAPHERS	390	0.06	33.42
ARTISTS AND RELATED WORKERS	640	0.10	30.84
DESIGNERS, EXCEPT INTERIOR DESIGNERS	1940	0.31	35.19
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	4260	0.69	N/A
SALES AND RELATED OCCUPATIONS	26940	4.36	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	4110	0.67	19.94
SALES AGENTS, ADVERTISING	1230	0.20	28.29
SALES ENGINEERS	2900	0.47	28.70
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	6770	1.10	20.47
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	6950	1.13	27.34
SALESPERSONS, RETAIL TRADE	810	0.13	36.52
CASHIERS	210	0.03	33.33
NEWS-ST VENDORS, PHONE SOLICITORS, DOOR-TO-DOOR	350	0.06	48.99

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MANUFACTURING TOTAL
SIC = 201-399
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SALES AND RELATED WORKERS	3620	0.59	23.92
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	87190	14.11	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	5310	0.86	19.59
ADJUSTMENT CLERKS	2930	0.47	21.01
LIBRARY ASSISTANTS AND BOOKMOBILE DRIVERS	50	0.01	21.74
ADVERTISING CLERKS	620	0.10	23.18
PROOFREADERS AND COPY MARKERS	750	0.12	36.40
SECRETARIES	15570	2.52	12.80
STENOGRAPHERS	190	0.03	45.74
RECEPTIONISTS AND INFORMATION CLERKS	1320	0.21	25.40
TYPISTS	2150	0.35	29.72
TYPISTS, WORD PROCESSING EQUIPMENT	900	0.15	32.48
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	970	0.16	18.13
FILE CLERKS	840	0.14	20.10
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	3010	0.49	25.76
PROCUREMENT CLERKS	950	0.15	18.31
STATISTICAL CLERKS	110	0.02	29.09
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	9110	1.47	17.37
PAYROLL AND TIMEKEEPING CLERKS	1550	0.25	16.35
BILLING, COST AND RATE CLERKS	1430	0.23	24.67
GENERAL OFFICE CLERKS	7270	1.18	23.17
BILLING, POSTING, CALCULATING MACH. OPERATORS	340	0.06	33.92
DUPLICATING MACHINE OPERATORS	20	N/A	47.37
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	2110	0.34	14.31
PERIPHERAL EDP EQUIPMENT OPERATORS	170	0.03	17.86
DATA ENTRY KEYERS, EXCEPT COMPOSING	2120	0.34	17.42
ALL OTHER OFFICE MACHINE OPERATORS	1400	0.23	N/A
SWITCHBOARD OPERATORS	1280	0.21	16.59
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	250	0.04	46.12
MESSENGERS	150	0.02	43.15
DISPATCHERS - EXCEPT POLICE, FIRE AND AMBULANCE	110	0.02	15.04
PRODUCTION, PLANNING AND EXPEDITING CLERKS	6730	1.09	15.58
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	400	0.06	33.92
MARKING CLERKS	90	0.01	18.89
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	5830	0.94	20.12
TRAFFIC, SHIPPING AND RECEIVING CLERKS	8030	1.30	18.76
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	1100	0.18	29.81
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	2080	0.34	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MANUFACTURING TOTAL
SIC = 201-399
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SERVICE OCCUPATIONS	10060	1.63	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	1730	0.28	28.66
GUARDS AND WATCH GUARDS	2160	0.35	15.17
FOOD,BEVERAGE PREPARATION AND SERVICE OCCUPATION	370	0.06	32.88
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	5170	0.84	17.29
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	290	0.05	24.83
ALL OTHER SERVICE WORKERS	360	0.06	9.78
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	350	0.06	N/A
LOG HANDLING EQUIPMENT OPERATORS	10	N/A	41.67
ALL OTHER TIMBER CUTTING & RELATED LOGGING WORKR	40	0.01	N/A
GRADERS AND SORTERS, AGRICULTURAL PRODUCTS	130	0.02	30.00
GARDENERS AND GROUNDSKEEPERS, EXCEPT FARM	50	0.01	4.35
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	90	0.01	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	334190	54.10	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRER	1870	0.30	22.09
MANAGER/SUPERS, CONSTR TRADES & EXTRACTIVE WORKR	140	0.02	25.74
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	16390	2.65	14.19
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	710	0.11	24.08
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	1310	0.21	34.84
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	540	0.09	32.90
PRECISION INSPECTORS, TESTERS AND GRADERS	6790	1.10	17.23
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	12870	2.08	18.34
MACHINERY MAINTENANCE MECHANICS	3620	0.59	17.61
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	390	0.06	17.74
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	220	0.04	26.70
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	160	0.03	42.59
ALL OTHER MACHINERY MAINTENANCE MECHANICS	660	0.11	24.24
MILLWRIGHTS	630	0.10	19.43
REFRACTORY MATERIALS REPAIRERS, EXC BRICK MASONS	10	N/A	42.86
MACHINERY MAINTENANCE WORKERS	830	0.13	22.17
MAINTENANCE REPAIRERS, GENERAL UTILITY	4210	0.68	29.71
AUTOMOTIVE MECHANICS	180	0.03	35.16
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	260	0.04	31.03
MOBILE HEAVY EQUIPMENT MECHANICS, EXCEPT ENGINES	10	N/A	38.46
DATA PROCESSING EQUIPMENT REPAIRERS	410	0.07	31.46
ELECTRONIC HOME ENTERTAINMENT EQUIPMENT REPAIRER	70	0.01	2.78

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MANUFACTURING TOTAL
SIC =201-399
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ELECTRONICS REPAIRERS, COMMERCIAL, IND EQUIPMENT	110	0.02	27.43
A O ELECTRONIC AND ELECTRICAL EQUIPMENT MECHANIC	20	N/A	N/A
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	430	0.07	47.80
PRECISION INSTRUMENT REPAIRERS	940	0.15	32.98
CAMERA AND PHOTOGRAPHIC EQUIPMENT REPAIRERS	10	N/A	40.00
RIGGERS	50	0.01	25.00
INSTALLERS, REPAIRERS - MANUFACTURED BLDGS	10	N/A	46.15
COIN AND VENDING MACHINE SERVICERS AND REPAIRERS	50	0.01	6.38
MENDERS	190	0.03	16.75
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	2150	0.35	N/A
CARPENTERS	1300	0.21	32.41
ELECTRICIANS	1720	0.28	16.53
BRICK MASONS	530	0.09	0.57
CONCRETE AND TERRAZZO FINISHERS	20	N/A	29.41
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	380	0.06	31.66
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	610	0.10	19.05
ALL OTHER CONSTRUCTION TRADES WORKERS	90	0.01	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	350	0.06	N/A
TOOL AND DIE MAKERS	3610	0.58	25.49
PRECISION INSTRUMENT MAKERS	240	0.04	40.50
MACHINISTS	13090	2.12	26.40
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	1880	0.30	48.08
PATTERN AND MODEL MAKERS, WOOD	100	0.02	25.74
SHIPFITTERS	110	0.02	32.08
JEWELERS AND SILVERSMITHS	210	0.03	28.29
PRECISION HAND WORKERS, JEWELERY, RELATED PRODUC	410	0.07	35.85
PRECISION ETCHERS AND ENGRAVERS, HAND OR MACHINE	110	0.02	16.98
SHEET METAL WORKERS	3340	0.54	36.56
BOILERMAKERS	70	0.01	37.88
ALL OTHER PRECISION METAL WORKERS	700	0.11	N/A
PRECISION WOODWORKERS	90	0.01	40.70
PATTERN MARKERS, WOOD	10	N/A	N/A
WOOD MACHINISTS	610	0.10	27.21
CABINETMAKERS AND BENCH CARPENTERS	1250	0.20	20.83
FURNITURE FINISHERS	200	0.03	18.59
ALL OTHER PRECISION WOODWORKERS	490	0.08	N/A
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	390	0.06	45.24
CUSTOM TAILORS AND SEWERS	200	0.03	40.00
UPHOLSTERERS	340	0.06	31.47
SHOE AND LEATHER WORKERS AND REPAIRERS	1660	0.27	9.10
PRECISION DYERS	170	0.03	24.71

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OCCUPATIONS OF EMPLOYEES
MANUFACTURING TOTAL
SIC = 201-399
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O PRECISION TEXTILE,APPAREL,FURNISHNGS WORKR	310	0.05	N/A
PRECISION COMPOSITORS, TYPESETTERS AND ARRANGERS	640	0.10	34.59
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	1250	0.20	18.44
ALL OTHER PRECISION PRINTING WORKERS	1030	0.17	N/A
SLAUGHTERERS AND BUTCHERS	230	0.04	19.47
BAKERS, MANUFACTURING	660	0.11	24.05
FOOD BATCHMAKERS	670	0.11	41.47
ALL OTHER PRECISION FOOD AND TOBACCO WORKERS	40	0.01	N/A
PRECISION FOUNDRY MOLD AND CORE MAKERS	330	0.05	28.83
PRECISION MLDRS, SHPRS, CSTRS, CRVRS, EXC JEWELR	260	0.04	41.18
PREC PATTERNMKRS, MODEL MAKRS, LAYT WORKRS, CUTT	60	0.01	35.71
PRECISION OPTICAL GOODS WORKERS	710	0.11	12.15
MEDICAL APPLIANCE MAKERS	370	0.06	49.46
GEM AND DIAMOND WORKERS	50	0.01	N/A
ALL OTHER PRECISION METAL WORKERS	1250	0.20	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	3620	0.59	36.19
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	1460	0.24	46.16
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	1760	0.28	40.52
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	1340	0.22	37.80
MACHINE TOOL CUTTING OPERATORS AND TENDERS	5900	0.96	35.81
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	1360	0.22	43.66
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	1320	0.21	42.33
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	650	0.11	45.44
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	1650	0.27	26.69
ROLLING MACHINE SETTERS, METAL AND PLASTIC	210	0.03	46.70
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	5220	0.84	38.55
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	2170	0.35	33.46
WELDING MACHINE OPERATORS AND TENDERS	750	0.12	44.70
METAL FABRICATORS, STRUCTURAL METAL PRODUCTS	1010	0.16	32.48
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	430	0.07	36.89
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	5370	0.87	19.20
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	260	0.04	43.89
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	460	0.07	40.52
FOUNDRY MOLD ASSEMBLY WORKERS	70	0.01	36.62
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	450	0.07	35.46
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	1530	0.25	25.18
NONELECTROLYTIC PLTNG, CTING MCH STTRS, SET-UP	70	0.01	46.38
NONELECTROLYTIC PLATNG, COATNG MCH OPS & TENDERS	40	0.01	46.34
HEATING EQUIPMENT SETTERS, SET-UP OPS, MET & PLA	90	0.01	11.36
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	570	0.09	35.60
FURNACE OPERATORS AND TENDERS	360	0.06	40.17

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	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HEATERS, METAL AND PLASTIC	90	0.01	47.13
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	3310	0.54	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	4360	0.71	N/A
SAWING MACHINE SETTERS	70	0.01	36.76
SAWING MACHINE OPERATORS AND TENDERS	350	0.06	38.00
WOODWORKING MACHINE SETTERS AND SET-UP OPERATORS	290	0.05	46.21
WOODWORKING MACHINE OPERATORS AND TENDERS	800	0.13	32.34
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	620	0.10	41.46
OFFSET LITHOGRAPHIC PRESS SETTRS,SET-UP OPERATORS	1420	0.23	26.86
LETTERPRESS SETTERS	600	0.10	41.51
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPERATORS	550	0.09	14.62
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	420	0.07	37.95
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	400	0.06	43.50
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	670	0.11	49.25
BINDERY MACHINE SET	780	0.13	33.89
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	360	0.06	N/A
TYPESETTING COMPOSING MACHINE OPERATORS	1870	0.30	17.08
PRINTING PRESS MACHINE OPERATORS AND TENDERS	3180	0.51	33.55
PHOTOENGRAVING, OTHER OPERATORS	70	0.01	23.94
BINDERY MACHINE OPERATORS	970	0.16	35.03
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	1200	0.19	45.88
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	580	0.09	23.22
TEXTILE MACHINE OPERATORS AND TENDERS	4760	0.77	18.78
EXTRUDING, FORMING MACHINE OPS, TNDRS, SYNTHETIC	540	0.09	40.11
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	250	0.04	4.40
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	1340	0.22	10.01
SEWING MACHINE OPERATOR, GARMENT	11350	1.84	9.61
SEWING MACHINE OPERATOR, NON-GARMENT	3160	0.51	28.61
SHOE SEWING MACHINE OPERATORS AND TENDERS	1360	0.22	17.18
LAUNDRY AND DRYCLEANING MACH OPERATORS AND TENDR	10	N/A	N/A
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	1030	0.17	16.21
ELECTRONIC SEMICONDUCTOR PROCESSORS	1550	0.25	33.55
PHOTOGRAPHIC PROCESS MACHINE OPERATORS	130	0.02	35.38
PAPER GOODS MACHINE SETTERS	2250	0.36	19.74
COOKING MACHINE OPERATORS,TENDERS,FOOD,TOBACCO	220	0.04	23.29
ROASTNG, BAKNG, DRYNG MCH OPS, TNDRS, FOOD & TOB	190	0.03	30.21
FURNACE, KILN, ETC OPERATORS	180	0.03	26.29
BOILER OPERATORS AND TENDERS, LOW PRESSURE	380	0.06	22.92
COOLING AND FREEZING EQUIPMENT OPERATORS, TENDER	170	0.03	37.50
DAIRY PROCESSING EQUIPMENT OPERATORS AND SETTERS	400	0.06	14.14
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	980	0.16	17.58

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CHEMICAL EQUIPMENT TENDERS	620	0.10	13.64
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	1740	0.28	35.23
PAINTERS, TRANSPORTATION EQUIPMENT	130	0.02	21.88
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	1050	0.17	43.05
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	2270	0.37	38.37
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	830	0.13	34.55
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	610	0.10	36.54
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	2850	0.46	28.43
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	560	0.09	44.78
EXTRUDING AND OTHER MACHINE OPERATORS	1170	0.19	29.57
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	4580	0.74	26.77
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	2410	0.39	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	5900	0.96	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	1650	0.27	38.77
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	5380	0.87	23.86
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	8410	1.36	21.34
ALL OTHER PRECISION ASSEMBLERS	590	0.10	N/A
ALL OTHER PRECISION ASSEMBLERS, EXCEPT METAL	150	0.02	N/A
MACHINE ASSEMBLERS	960	0.16	46.88
ELECTRICAL AND ELECTRONIC ASSEMBLERS	8900	1.44	22.55
WELDERS AND CUTTERS	2280	0.37	31.80
SOLDERERS AND BRAZERS	1160	0.19	39.19
PRESSERS, HAND	280	0.05	25.80
HAND SEWERS	500	0.08	28.66
HAND CUTTERS AND TRIMMERS	1910	0.31	36.06
PORTABLE MACHINE CUTTERS	180	0.03	39.77
MEAT, POULTRY AND FISH CUTTERS AND TRIMMERS	630	0.10	36.58
HAND MOLDERS AND CASTERS	90	0.01	40.43
HAND PAINTING AND RELATED WORKERS	480	0.08	39.41
GRINDING AND POLISHING WORKERS, HAND	2250	0.36	40.94
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	26810	4.34	21.81
ALL OTHER HAND WORKERS	5440	0.88	N/A
PLANT AND SYSTEMS OCCUPATIONS	210	0.03	31.43
WASTE TREAT PLANT OPERATORS	10	N/A	N/A
CHEMICAL PLANT AND SYSTEMS OPERATORS	220	0.04	17.35
POWER DISTRIBUTORS AND DISPATCHERS	10	N/A	N/A
STATIONARY ENGINEERS	160	0.03	27.22
ALL OTHER PLANT AND SYSTEMS OPERATORS	160	0.03	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	3320	0.54	23.64
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKR	2210	0.36	29.50
DRIVER / SALES WORKERS	1820	0.29	21.85

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	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER MOTOR VEHICLE OPERATORS	10	N/A	N/A
ALL OTHER TRANSPORTATION AND RELATED WORKERS	190	0.03	35.08
TANK CAR AND TRUCK LOADERS	20	N/A	20.00
GRADER, DOZER AND SCRAPER OPERATORS	60	0.01	42.37
CRANE AND TOWER OPERATORS	120	0.02	42.02
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	2470	0.40	23.40
CONVEYOR OPERATORS AND TENDERS	440	0.07	24.54
PUMP OPERATORS	20	N/A	43.75
OPERATING ENGINEERS	40	0.01	27.78
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	580	0.09	N/A
MECHANIC AND REPAIRER HELPERS	870	0.14	29.33
MACHINE FEEDERS AND OFFBEARERS	4660	0.75	40.34
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	6380	1.03	28.26
HAND PACKERS AND PACKAGERS	10280	1.66	32.65
VEHICLE WASHERS AND EQUIPMENT CLEANERS	380	0.06	34.57
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	17200	2.78	N/A

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The manufacturing industries which make up the "High Technology Industries" grouping are as follows:

High Technology Industries

SIC Code	Name of Industry
283	Drugs
348	Ordnance & Accessories Exc. Vehicles & Guided Missiles
357	Office, Computing & Accting, Machines
36	Elec. & Electr Mach. Equip. & Supplies
376	Guided Missiles & Space Vehicles & Parts
379	Miscellaneous Transportation Equipment
38	Measuring, Analyzing, & Controlling Instruments; Photographic, Medical & Optical Goods; Watches and Alarm Clocks.

These industries were not grouped together in prior occupational employment surveys. One of the purposes of this new "High Tech" grouping is for the reader to be able to compare the occupational distribution of "High Tech" industries with those of other manufacturing industries as well as to identify which occupational categories as well as particular occupations are predominant within "High Tech".

Total employment in the 1986 survey of high technology industries totalled 249,080, or approximately 40 percent ot total manufacturing employment.

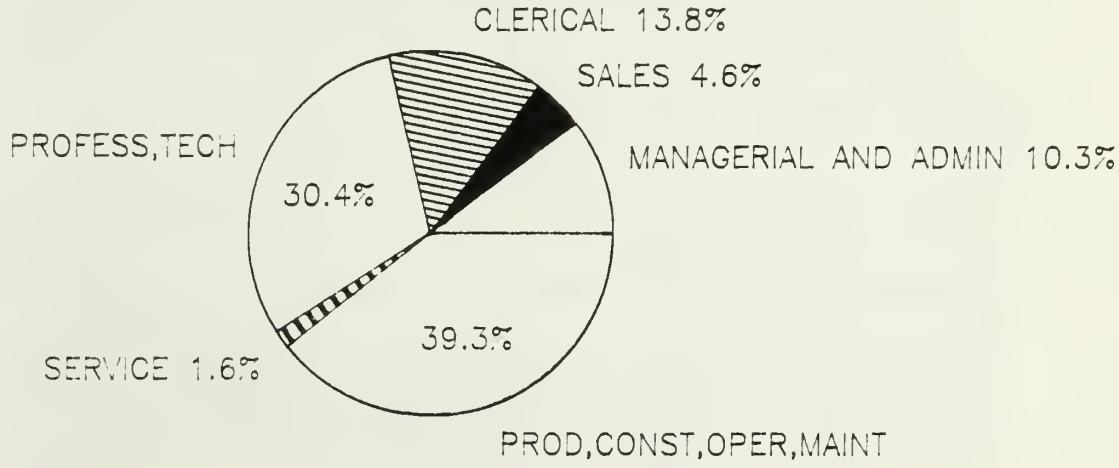
The largest occupational grouping was production and maintenance at nearly 98,000 jobs or 39.3 percent of total "High Tech" employment. The professional and technical occupational grouping was second in size with nearly 76,000 jobs or 30.4 percent of total "High Tech" employment. These figures contrast with the overall manufacturing distribution where 54.1 percent of jobs were concentrated in the production and maintenance category and only 16.9 percent in the professional and technical grouping.

Within the professional and technical grouping, the largest single occupation was electrical and electronic engineers which numbered nearly 18,000 jobs or slightly more than 7 percent of total "High Tech" employment. This particular professional occupation was more than twice the size of the next largest professional occupation of electrical, electronic engineering technologists and technicians.

Within production and maintenance, assemblers and fabricators (except for electric and electronic machinery) was the most predominant occupation with over 11,000 jobs or approximately 4.5 percent of total "High Tech" employment.

HIGH TECHNOLOGY INDUSTRIES

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Electrical and Electronic Engineers	17830
2.	Assemblers, Fabricators, except Machine, Electrical, Electronic	11290
3.	Secretaries	8880
4.	Electrical and Electronic Assemblers	8580
5.	All Other Helpers, Laborers, Material Movers	8120
6.	Electrical, Electronic Equipment Assemblers	8060
7.	Electrical, Electronic Engineering Technicians & Technologist	8050
8.	Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers	6680
9.	All Other Management Support Workers	6140
10.	Engineering, Mathematical and Naturial Sciences Managers	5480

OCCUPATIONS OF EMPLOYEES
HIGH TECHNOLOGY INDUSTRIES
SIC =283,348,357,36,376,379,38
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	249080	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	25620	10.29	N/A
FINANCIAL MANAGERS	2490	1.00	9.42
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	1230	0.49	11.43
PURCHASING MANAGERS	760	0.31	12.85
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	2700	1.08	12.76
ADMINISTRATIVE SERVICES MANAGERS	800	0.32	13.98
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	5480	2.20	8.58
INDUSTRIAL PRODUCTION MANAGERS	4930	1.98	9.68
GENERAL MANAGERS AND TOP EXECUTIVES	3470	1.39	12.00
ALL OTHER MANAGERS AND ADMINISTRATORS	3760	1.51	22.18
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	75740	30.41	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	2290	0.92	11.44
BUDGET ANALYSTS	1060	0.43	12.97
ALL OTHER FINANCIAL SPECIALISTS	1370	0.55	13.75
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	2120	0.85	9.79
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	1930	0.77	13.19
COST ESTIMATORS	570	0.23	22.38
ALL OTHER MANAGEMENT SUPPORT WORKERS	6140	2.47	15.44
AERONAUTICAL AND ASTRONAUTICAL ENGINEERS	470	0.19	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	70	0.03	14.93
CHEMICAL ENGINEERS	370	0.15	37.63
CIVIL ENGINEERS, INCLUDING TRAFFIC	10	N/A	20.00
ELECTRICAL AND ELECTRONIC ENGINEERS	17830	7.16	9.58
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	2900	1.16	15.54
SAFETY ENGINEERS, EXCEPT MINING	60	0.02	37.70
MECHANICAL ENGINEERS	5380	2.16	7.81
ALL OTHER ENGINEERS	2750	1.10	23.34
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	20	0.01	21.05
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	8050	3.23	11.90
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	830	0.33	21.71
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	1820	0.73	16.36
DRAFTERS	2510	1.01	11.98
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	2300	0.92	15.16
PHYSICAL SCIENTISTS	90	0.04	2.35
PHYSICISTS AND ASTRONOMERS	80	0.03	24.39
CHEMISTS, EXCEEPT BIOCHEMISTS	430	0.17	27.80

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HIGH TECHNOLOGY INDUSTRIES
SIC =283,348,357,36,376,379,38
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PHYSICAL SCIENTISTS	20	0.01	20.00
BIOLOGICAL SCIENTISTS	100	0.04	37.25
MEDICAL SCIENTISTS	20	0.01	N/A
ALL OTHER LIFE SCIENTISTS	70	0.03	N/A
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	20	0.01	N/A
BIOLOGICAL, AGRIC, FOOD TECHNOL, EXC. HEALTH	50	0.02	25.00
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	510	0.20	32.29
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	20	0.01	36.84
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	4400	1.77	11.67
COMPUTER PROGRAMMERS	2460	0.99	23.84
COMPUTER PROGRAMMER AIDES	330	0.13	23.05
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	190	0.08	23.04
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	310	0.12	21.22
MATHEMATICAL SCIENTISTS	40	0.02	42.86
LAWYERS	60	0.02	9.38
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	160	0.06	6.75
OPTICIANS, DISPENSING AND MEASURING	60	0.02	21.67
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	60	0.02	N/A
WRITERS AND EDITORS	530	0.21	12.24
TECHNICAL WRITERS	940	0.38	16.61
ARTISTS AND RELATED WORKERS	70	0.03	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	560	0.22	21.62
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	3330	1.34	14.57
SALES AND RELATED OCCUPATIONS	11410	4.58	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	1690	0.68	14.67
SALES ENGINEERS	2120	0.85	28.52
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	4700	1.89	16.31
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	820	0.33	38.36
ALL OTHER SALES AND RELATED WORKERS	2080	0.84	20.13
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	34510	13.86	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	2270	0.91	17.36
ADJUSTMENT CLERKS	870	0.35	17.32
SECRETARIES	8880	3.57	7.51
STENOGRAPHERS	20	0.01	31.58
RECEPTIONISTS AND INFORMATION CLERKS	430	0.17	19.39
TYPISTS	660	0.26	20.43
TYPISTS, WORD PROCESSING EQUIPMENT	500	0.20	23.79

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HIGH TECHNOLOGY INDUSTRIES
SIC =283,348,357,36,376,379,38
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	530	0.21	16.00
FILE CLERKS	390	0.16	18.60
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	840	0.34	18.51
PROCUREMENT CLERKS	460	0.18	16.45
STATISTICAL CLERKS	60	0.02	20.31
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	2760	1.11	9.71
PAYROLL AND TIMEKEEPING CLERKS	440	0.18	13.53
BILLING, COST AND RATE CLERKS	400	0.16	17.09
GENERAL OFFICE CLERKS	1710	0.69	18.27
BILLING, POSTING, CALCULATING MACH. OPERATORS	60	0.02	27.12
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	1330	0.53	9.77
PERIPHERAL EDP EQUIPMENT OPERATORS	140	0.06	16.55
DATA ENTRY KEYERS, EXCEPT COMPOSING	790	0.32	12.03
ALL OTHER OFFICE MACHINE OPERATORS	260	0.10	11.58
SWITCHBOARD OPERATORS	540	0.22	15.13
PRODUCTION, PLANNING AND EXPEDITING CLERKS	3640	1.46	9.35
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	90	0.04	28.72
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	2480	1.00	10.87
TRAFFIC, SHIPPING AND RECEIVING CLERKS	2150	0.86	12.79
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	340	0.14	19.59
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	1480	0.59	N/A
SERVICE OCCUPATIONS	3960	1.59	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	570	0.23	20.46
GUARDS AND WATCH GUARDS	1270	0.51	11.78
ALL OTHER FOOD SERVICE WORKERS	40	0.02	N/A
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	1940	0.78	13.02
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	90	0.04	21.59
ALL OTHER SERVICE WORKERS	60	0.02	18.64
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	30	0.01	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	97820	39.27	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	730	0.29	20.08
MANAGER/SUPERS, CONSTR TRADES & EXTRACTIVE WORKR	20	0.01	17.39
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	5340	2.14	9.56
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	200	0.08	17.77

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HIGH TECHNOLOGY INDUSTRIES
SIC =283,348,357,36,376,379,38
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - HLPRS,LABRRS,MATL MOVERS	420	0.17	24.94
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	270	0.11	40.52
PRECISION INSPECTORS, TESTERS AND GRADERS	4600	1.85	12.99
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	6680	2.68	15.45
MACHINERY MAINTENANCE MECHANICS	1170	0.47	13.37
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	N/A	N/A
MILLWRIGHTS	130	0.05	14.96
MACHINERY MAINTENANCE WORKERS	70	0.03	11.27
MAINTENANCE REPAIRERS, GENERAL UTILITY	1150	0.46	23.14
AUTOMOTIVE MECHANICS	10	N/A	N/A
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	10	N/A	N/A
DATA PROCESSING EQUIPMENT REPAIRERS	410	0.16	31.46
ELECTRONIC HOME ENTERTAINMENT EQUIPMENT REPAIRER	70	0.03	2.78
ELECTRONICS REPAIRERS, COMMERCIAL, IND EQUIPMENT	110	0.04	27.43
A O ELECTRONIC AND ELECTRICAL EQUIPMENT MECHANIC	10	N/A	N/A
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	160	0.06	7.93
PRECISION INSTRUMENT REPAIRERS	790	0.32	38.22
CAMERA AND PHOTOGRAPHIC EQUIPMENT REPAIRERS	10	N/A	40.00
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	1150	0.46	24.20
CARPENTERS	240	0.10	9.79
ELECTRICIANS	670	0.27	9.15
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	120	0.05	17.07
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	260	0.10	16.79
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	70	0.03	25.35
TOOL AND DIE MAKERS	1010	0.41	14.50
PRECISION INSTRUMENT MAKERS	240	0.10	40.50
MACHINISTS	3020	1.21	19.81
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	140	0.06	27.94
SHEET METAL WORKERS	450	0.18	29.84
BOILERMAKERS	40	0.02	N/A
ALL OTHER PRECISION METAL WORKERS	180	0.07	N/A
PRECISION WOODWORKERS	90	0.04	40.70
ALL OTHER PRECISION WOODWORKERS	10	N/A	44.44
PRECISION OPTICAL GOODS WORKERS	710	0.29	12.15
MEDICAL APPLIANCE MAKERS	370	0.15	49.46
ALL OTHER PRECISION METAL WORKERS	140	0.06	38.46
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	40	0.02	39.47
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	480	0.19	35.95
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	140	0.06	30.77
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	230	0.09	44.44
MACHINE TOOL CUTTING OPERATORS AND TENDERS	1780	0.71	39.11

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OCCUPATIONS OF EMPLOYEES
HIGH TECHNOLOGY INDUSTRIES
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REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	260	0.10	48.47
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	310	0.12	34.95
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	230	0.09	45.69
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	80	0.03	N/A
FORGING MACHINE SETTERS AND SET-UP OPS, MET & PL	80	0.03	N/A
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	1180	0.47	20.88
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	870	0.35	27.49
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	180	0.07	46.86
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	380	0.15	49.74
WELDING MACHINE SETTERS AND SET-UP OPERATORS	80	0.03	40.96
WELDING MACHINE OPERATORS AND TENDERS	280	0.11	29.71
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	70	0.03	45.21
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	250	0.10	28.97
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	10	N/A	41.67
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	110	0.04	25.23
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	770	0.31	28.05
NONELECTROLYTIC PLTNG, CTING MCH STTRS, SET-UP	10	N/A	N/A
HEATING EQUIPMENT SETTERS, SET-UP OPS, MET & PLA	20	0.01	5.56
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	210	0.08	46.19
FURNACE OPERATORS AND TENDERS	90	0.04	37.36
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	1090	0.44	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	950	0.38	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	30	0.01	48.48
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	340	0.14	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	30	0.01	13.79
ELECTRONIC SEMICONDUCTOR PROCESSORS	1540	0.62	33.61
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	N/A	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	140	0.06	6.29
CHEMICAL EQUIPMENT TENDERS	410	0.16	2.22
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	260	0.10	33.07
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	340	0.14	40.41
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	170	0.07	32.14
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	310	0.12	38.66
EXTRUDING AND OTHER MACHINE OPERATORS	30	0.01	34.38
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	370	0.15	43.16
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	680	0.27	11.63
ALL OTHER MACHINE OPERATORS AND TENDERS	1410	0.57	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	380	0.15	38.36
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	5100	2.05	23.36
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	8060	3.24	20.85
ALL OTHER PRECISION ASSEMBLERS	230	0.09	38.50

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HIGH TECHNOLOGY INDUSTRIES
SIC =283,348,357,36,376,379,38
REFERENCE DATE 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PRECISION ASSEMBLERS, EXCEPT METAL	150	0.06	N/A
MACHINE ASSEMBLERS	590	0.24	49.15
ELECTRICAL AND ELECTRONIC ASSEMBLERS	8580	3.44	22.28
COIL WINDERS, TAPERS, AND FINISHERS	470	0.19	44.99
WELDERS AND CUTTERS	440	0.18	37.56
SOLDERERS AND BRAZERS	930	0.37	37.46
HAND PAINTING AND RELATED WORKERS	10	N/A	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	11290	4.53	19.15
ALL OTHER HAND WORKERS	1690	0.68	N/A
PLANT AND SYSTEMS OCCUPATIONS	110	0.04	37.38
ALL OTHER PLANT AND SYSTEMS OPERATORS	20	0.01	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	120	0.05	14.05
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKR	310	0.12	18.89
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	N/A	N/A
CRANE AND TOWER OPERATORS	10	N/A	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	300	0.12	15.93
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	20	0.01	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	130	0.05	36.57
MECHANIC AND REPAIRER HELPERS	360	0.14	46.07
MACHINE FEEDERS AND OFFBEARERS	570	0.23	33.63
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	1340	0.54	23.66
HAND PACKERS AND PACKAGERS	970	0.39	40.62
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	8120	3.26	4.38

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N/A - NOT AVAILABLE

Food and Kindred Products

SIC 20

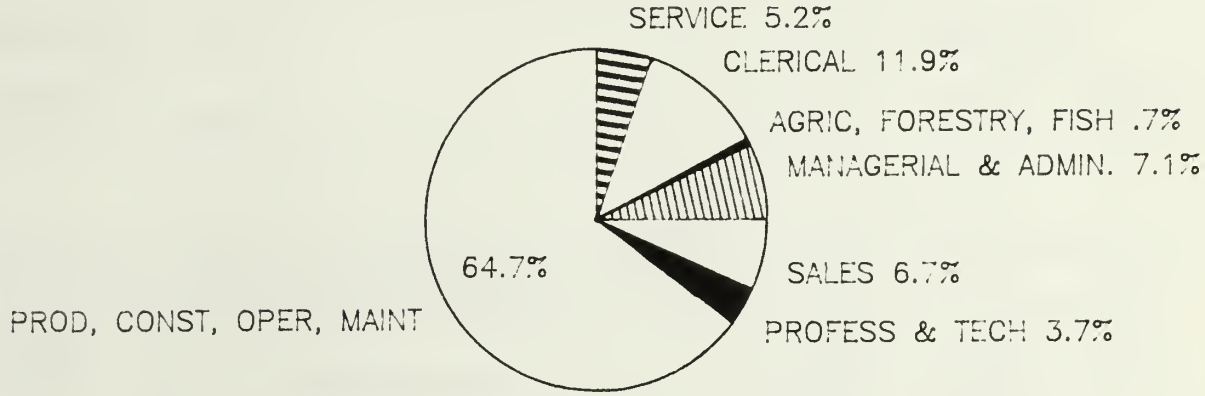
This major group includes establishments manufacturing or processing foods and beverages for human consumption,and certain related products, oils, and prepared feed for animals and fowls.

Employment in the food and kindred products industry accounted for less than four percent of 1986 manufacturing employment declining by 1,400 since 1983. Contributing to the decline were the ever increasing number of fast food outlets and the increased use of labor saving automated equipment by the food processors.

The majority of occupations in this industry, 65 percent, are in the production and maintenance category with 2,120 jobs for packaging machine operators and 880 jobs for hand packers and packagers. Other than in the production area, the two most important occupations are general managers/top executives with 600 jobs and sales representatives employing 550 people.

FOOD AND KINDRED PRODUCTS (SIC-20)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Packaging, Filling Machine Operators and Tenders	2120
2.	All Other Helpers, Laborers, Material Movers	970
3.	Hand Packers and Packagers	880
4.	Drivers/Sales Workers	870
5.	Truck Drivers Heavy or Tractor Trailer	670
6.	Food Batchmakers	670
7.	Bakers, Manufacturing	660
8.	First Line Supervisors - Production, Operating Workers	650
9.	Meat, Poultry and Fish Cutters and Trimmers	630
10.	General Managers and Top Executives	600

OCCUPATIONS OF EMPLOYEES
FOOD AND KINDRED PRODUCTS
SIC = 20
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	22700	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1620	7.14	N/A
FINANCIAL MANAGERS	140	0.62	16.31
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	60	0.26	12.07
PURCHASING MANAGERS	50	0.22	18.52
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	210	0.93	13.94
ADMINISTRATIVE SERVICES MANAGERS	30	0.13	42.42
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	70	0.31	11.43
INDUSTRIAL PRODUCTION MANAGERS	300	1.32	17.16
GENERAL MANAGERS AND TOP EXECUTIVES	600	2.64	15.13
ALL OTHER MANAGERS AND ADMINISTRATORS	160	0.70	28.03
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	830	3.66	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	170	0.75	24.85
ALL OTHER FINANCIAL SPECIALISTS	40	0.18	N/A
PURCHASING AGENTS AND BUYERS, FARM PRODUCTS	20	0.09	30.43
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	50	0.22	31.11
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	110	0.48	19.82
COST ESTIMATORS	20	0.09	26.32
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.09	26.32
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.09	25.00
MECHANICAL ENGINEERS	20	0.09	26.09
ALL OTHER ENGINEERS	20	0.09	20.00
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.04	20.00
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.04	N/A
CHEMISTS, EXCEPT BIOCHEMISTS	20	0.09	22.22
LIFE SCIENTISTS	10	0.04	12.50
BIOLOGICAL, AGRIC, FOOD TECHNOL, EXC. HEALTH	130	0.57	26.92
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	40	0.18	45.24
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.04	12.50
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	50	0.22	12.00
COMPUTER PROGRAMMERS	30	0.13	22.58
COMPUTER PROGRAMMER AIDES	20	0.09	16.67
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.04	10.00
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.04	N/A
SALES AND RELATED OCCUPATIONS	1530	6.74	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FOOD AND KINDRED PRODUCTS
SIC = 20
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	180	0.79	29.51
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	30	0.13	33.33
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	550	2.42	26.78
SALESPERSONS, RETAIL TRADE	530	2.33	32.96
CASHIERS	180	0.79	36.96
ALL OTHER SALES AND RELATED WORKERS	50	0.22	26.09
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2690	11.85	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	180	0.79	23.43
ADJUSTMENT CLERKS	130	0.57	34.65
SECRETARIES	380	1.67	15.71
RECEPTIONISTS AND INFORMATION CLERKS	40	0.18	24.39
TYPISTS	40	0.18	11.90
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.04	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	30	0.13	12.12
FILE CLERKS	10	0.04	14.29
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	80	0.35	32.10
PROCUREMENT CLERKS	10	0.04	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	420	1.85	21.46
PAYROLL AND TIMEKEEPING CLERKS	70	0.31	14.71
BILLING, COST AND RATE CLERKS	90	0.40	34.44
GENERAL OFFICE CLERKS	270	1.19	20.66
BILLING, POSTING, CALCULATING MACH. OPERATORS	20	0.09	37.50
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.18	14.29
DATA ENTRY KEYERS, EXCEPT COMPOSING	110	0.48	21.70
SWITCHBOARD OPERATORS	40	0.18	10.26
PRODUCTION, PLANNING AND EXPEDITING CLERKS	70	0.31	21.43
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	120	0.53	33.04
TRAFFIC, SHIPPING AND RECEIVING CLERKS	430	1.89	17.21
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	90	0.40	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.04	N/A
SERVICE OCCUPATIONS	1190	5.24	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	110	0.48	31.58
GUARDS AND WATCH GUARDS	30	0.13	18.18
FOOD, BEVERAGE PREPARATION AND SERV. OCCUPATIONS	320	1.41	30.94
JANITORS & CLEANERS,EX.MAIDS & HOUSE CLEANERS	490	2.16	26.57
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	60	0.26	35.09

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FOOD AND KINDRED PRODUCTS
SIC = 20
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SERVICE WORKERS	170	0.75	0.57
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	170	0.75	N/A
GRADERS AND SORTERS, AGRICULTURAL PRODUCTS	130	0.57	30.00
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	40	0.18	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	14680	64.67	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	100	0.44	19.42
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	650	2.86	30.56
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	60	0.26	20.34
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	40	0.18	22.50
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	30	0.13	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	60	0.26	24.56
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	350	1.54	42.82
MACHINERY MAINTENANCE MECHANICS	440	1.94	20.00
MILLWRIGHTS	30	0.13	38.46
MACHINERY MAINTENANCE WORKERS	40	0.18	29.55
MAINTENANCE REPAIRERS, GENERAL UTILITY	210	0.93	35.38
AUTOMOTIVE MECHANICS	50	0.22	13.46
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	70	0.31	43.84
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	20	0.09	41.18
COIN AND VENDING MACHINE SERVICERS AND REPAIRERS	50	0.22	6.38
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	30	0.13	N/A
CARPENTERS	60	0.26	12.07
ELECTRICIANS	50	0.22	15.09
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	30	0.13	N/A
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.04	20.00
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	70	0.31	2.82
MACHINISTS	20	0.09	13.33
SHEET METAL WORKERS	10	0.04	20.00
SLAUGHTERERS AND BUTCHERS	230	1.01	19.47
BAKERS, MANUFACTURING	660	2.91	24.05
FOOD BATCHMAKERS	670	2.95	41.47
ALL OTHER PRECISION FOOD AND TOBACCO WORKERS	40	0.18	N/A
COOKING MACHINE OPERATORS,TENDERS,FOOD,TOBACCO	220	0.97	23.29
ROASTNG, BAKNG, DRYNG MCH OPS, TNDRS, FOOD & TOB	190	0.84	30.21
BOILER OPERATORS AND TENDERS, LOW PRESSURE	30	0.13	29.63
COOLING AND FREEZING EQUIPMENT OPERATORS, TENDER	170	0.75	37.50
DAIRY PROCESSING EQUIPMENT OPERATORS AND SETTERS	400	1.76	14.14

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FOOD AND KINDRED PRODUCTS
SIC = 20
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	10	0.04	18.18
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	170	0.75	28.40
CLEANING,WASHING,PICKLING EQUIPMENT OPS,TENDERS	190	0.84	41.62
CRUSHNG,GRINDNG,MIXNG & BLENDING MCH OPS,TNDR	270	1.19	21.32
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	60	0.26	30.36
EXTRUDING AND OTHER MACHINE OPERATORS	150	0.66	44.08
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	2120	9.34	16.11
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	80	0.35	41.46
ALL OTHER MACHINE OPERATORS AND TENDERS	330	1.45	N/A
MEAT, POULTRY AND FISH CUTTERS AND TRIMMERS	630	2.78	36.58
HAND MOLDERS AND CASTERS	20	0.09	33.33
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	30	0.13	4.00
ALL OTHER HAND WORKERS	380	1.67	N/A
STATIONARY ENGINEERS	20	0.09	15.79
ALL OTHER PLANT AND SYSTEMS OPERATORS	30	0.13	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	670	2.95	21.01
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	370	1.63	42.47
DRIVER / SALES WORKERS	870	3.83	24.89
ALL OTHER TRANSPORTATION AND RELATED WORKERS	30	0.13	44.00
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	270	1.19	24.63
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.04	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	30	0.13	43.75
MECHANIC AND REPAIRER HELPERS	40	0.18	36.11
MACHINE FEEDERS AND OFFBEARERS	320	1.41	45.89
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	420	1.85	30.79
HAND PACKERS AND PACKAGERS	880	3.88	27.76
VEHICLE WASHERS AND EQUIPMENT CLEANERS	270	1.19	49.06
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	970	4.27	26.11

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MEAT PRODUCTS
SIC = 201
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2240	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	160	7.14	N/A
FINANCIAL MANAGERS	20	0.89	11.11
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.45	12.85
PURCHASING MANAGERS	10	0.45	13.32
MARKETING,ADVERTISING,PUBLIC RELATIONS MGRS.	10	0.45	18.18
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.45	19.99
INDUSTRIAL PRODUCTION MANAGERS	10	0.45	22.58
GENERAL MANAGERS AND TOP EXECUTIVES	60	2.68	9.88
ALL OTHER MANAGERS AND ADMINISTRATORS	30	1.34	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	60	2.68	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.45	21.65
PURCHASING AGENTS AND BUYERS, FARM PRODUCTS	10	0.45	16.66
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.45	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.45	35.35
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.89	N/A
SALES AND RELATED OCCUPATIONS	160	7.14	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.45	34.64
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	90	4.02	15.20
SALESPERSONS, RETAIL TRADE	60	2.68	35.89
ALL OTHER SALES AND RELATED WORKERS	20	0.89	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	190	8.48	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.89	13.60
ADJUSTMENT CLERKS	10	0.45	20.20
SECRETARIES	20	0.89	11.66
RECEPTIONISTS AND INFORMATION CLERKS	10	0.45	24.74
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	30	1.34	14.65
PAYROLL AND TIMEKEEPING CLERKS	10	0.45	N/A
GENERAL OFFICE CLERKS	30	1.34	21.85
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.45	20.20
TRAFFIC, SHIPPING AND RECEIVING CLERKS	30	1.34	17.11
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.89	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.45	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MEAT PRODUCTS
SIC = 201
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SERVICE OCCUPATIONS	100	4.46	N/A
1ST LINE SUPERVISORS,MANAGER-SUPERS -SERVICE	20	0.89	20.39
JANITORS & CLEANERS,EX.MAIDS & HOUSE CLEANERS	80	3.57	36.13
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1560	69.64	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	30	1.34	18.51
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	30	1.34	48.27
MACHINERY MAINTENANCE MECHANICS	10	0.45	15.74
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.45	49.99
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.45	N/A
SLAUGHTERERS AND BUTCHERS	230	10.27	19.28
ALL OTHER PRECISION FOOD AND TOBACCO WORKERS	20	0.89	N/A
COOKING MACHINE OPERATORS, TENDERS, FOOD, TOBACCO	100	4.46	24.74
ROASTNG, BAKNG, DRYNG MCH OPS, TNDRS, FOOD & TOB	10	0.45	47.38
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	120	5.36	21.43
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	140	6.25	16.09
ALL OTHER MACHINE OPERATORS AND TENDERS	120	5.36	N/A
MEAT, POULTRY AND FISH CUTTERS AND TRIMMERS	220	9.82	43.80
ALL OTHER HAND WORKERS	20	0.89	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	30	1.34	17.12
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	90	4.02	20.54
DRIVER / SALES WORKERS	30	1.34	38.65
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.45	47.14
ALL OTHER HELPERS, LABORERS,MOVERS - HAND	50	2.23	N/A
HAND PACKERS AND PACKAGERS	230	10.27	22.07
VEHICLE WASHERS AND EQUIPMENT CLEANERS	40	1.79	32.61
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	40	1.79	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.45	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
DAIRY PRODUCTS
SIC = 202
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4540	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	380	8.37	N/A
FINANCIAL MANAGERS	30	0.66	22.96
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.22	24.99
PURCHASING MANAGERS	10	0.22	20.20
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	50	1.10	7.21
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	40	0.88	7.15
INDUSTRIAL PRODUCTION MANAGERS	70	1.54	13.43
GENERAL MANAGERS AND TOP EXECUTIVES	80	1.76	12.65
ALL OTHER MANAGERS AND ADMINISTRATORS	100	2.20	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	300	6.61	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	40	0.88	12.24
ALL OTHER FINANCIAL SPECIALISTS	20	0.44	22.94
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.22	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	80	1.76	1.83
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.22	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.22	24.74
MECHANICAL ENGINEERS	10	0.22	N/A
BIOLOGICAL, AGRIC, FOOD TECHNOL, EXC. HEALTH	70	1.54	33.16
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.22	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	30	0.66	9.67
COMPUTER PROGRAMMERS	10	0.22	27.27
COMPUTER PROGRAMMER AIDES	10	0.22	23.57
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.22	N/A
SALES AND RELATED OCCUPATIONS	210	4.63	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.66	23.12
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	150	3.30	32.96
ALL OTHER SALES AND RELATED WORKERS	30	0.66	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	830	18.28	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	1.10	30.20
ADJUSTMENT CLERKS	100	2.20	37.16
SECRETARIES	190	4.19	7.31
TYPISTS	20	0.44	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
DAIRY PRODUCTS
SIC = 202
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.22	10.87
PROCUREMENT CLERKS	10	0.22	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	80	1.76	18.93
PAYROLL AND TIMEKEEPING CLERKS	20	0.44	11.76
BILLING, COST AND RATE CLERKS	40	0.88	8.08
GENERAL OFFICE CLERKS	100	2.20	18.43
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.22	21.42
DATA ENTRY KEYERS, EXCEPT COMPOSING	30	0.66	4.71
SWITCHBOARD OPERATORS	20	0.44	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	40	0.88	25.81
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.44	36.05
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	0.88	25.51
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	0.88	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.22	N/A
SERVICE OCCUPATIONS	170	3.74	N/A
ALL OTHER SERVICE SUPERVISORS	10	0.22	N/A
FOOD, BEVERAGE PREPARATION AND SERV. OCCUPATIONS	130	2.86	N/A
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	20	0.44	23.45
ALL OTHER SERVICE WORKERS	10	0.22	14.14
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2660	58.59	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.22	31.94
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	100	2.20	16.34
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	30	0.66	16.87
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	30	0.66	N/A
ALL OTHER INSPECTORS, TESTERS, RELATED OCC.	10	0.22	N/A
MACHINERY MAINTENANCE MECHANICS	60	1.32	23.41
MAINTENANCE REPAIRERS, GENERAL UTILITY	70	1.54	33.47
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	20	0.44	26.83
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	40	0.88	N/A
CARPENTERS	40	0.88	7.18
ELECTRICIANS	20	0.44	25.76
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	70	1.54	N/A
BAKERS, MANUFACTURING	40	0.88	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
DAIRY PRODUCTS
SIC = 202
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FOOD BATCHMAKERS	190	4.19	27.89
COOLING AND FREEZING EQUIPMENT OPERATORS,TENDERS	160	3.52	38.06
DAIRY PROCESSING EQUIPMENT OPERATORS AND SETTERS	400	8.81	14.12
CLEANING, WASHING,PICKLING EQUIPMENT OPS,TENDERS	50	1.10	40.79
PACKAGING,FILLING MACHINE OPERATORS AND TENDERS	330	7.27	14.84
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	0.66	29.37
ALL OTHER MACHINE OPERATORS AND TENDERS	40	0.88	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	20	0.44	N/A
STATIONARY ENGINEERS	10	0.22	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	290	6.39	19.94
TRUCK DRIVERS, LIGHT,INCL DELIVERY, ROUTE WORKERS	40	0.88	39.56
DRIVER / SALES WORKERS	170	3.74	17.10
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.22	45.17
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	60	1.32	43.96
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.22	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	240	5.29	20.54
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	60	1.32	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.22	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRESERVED FRUITS AND VEGETABLES
SIC = 203
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1520	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	120	7.89	N/A
FINANCIAL MANAGERS	10	0.66	38.72
PURCHASING MANAGERS	10	0.66	28.28
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	1.32	21.32
INDUSTRIAL PRODUCTION MANAGERS	20	1.32	12.89
GENERAL MANAGERS AND TOP EXECUTIVES	50	3.29	14.90
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.66	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	90	5.92	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	1.32	26.50
PURCHASING AGENTS AND BUYERS, FARM PRODUCTS	10	0.66	39.99
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.66	40.40
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.66	N/A
BIOLOGICAL, AGRIC, FOOD TECHNOL, EXC. HEALTH	30	1.97	21.59
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.66	N/A
COMPUTER PROGRAMMERS	10	0.66	33.07
ALL OTHER PROFESSIONAL, PARAPROF.,& TECHNICAL	10	0.66	N/A
SALES AND RELATED OCCUPATIONS	60	3.95	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.66	41.64
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	40	2.63	36.17
SALESPERSONS, RETAIL TRADE	10	0.66	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	210	13.82	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.66	28.86
SECRETARIES	20	1.32	26.45
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	1.32	43.71
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	2.63	26.64
PAYROLL AND TIMEKEEPING CLERKS	10	0.66	29.39
GENERAL OFFICE CLERKS	20	1.32	16.49
ALL OTHER OFFICE MACHINE OPERATORS	20	1.32	N/A
SWITCHBOARD OPERATORS	10	0.66	19.99
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.66	34.64
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	2.63	12.12
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.66	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRESERVED FRUITS AND VEGETABLES
SIC = 203
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.32	N/A
SERVICE OCCUPATIONS	90	5.92	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.66	30.00
ALL OTHER FOOD SERVICE WORKERS	10	0.66	N/A
JANITORS & CLEANERS,EX.MAID & HOUSE CLEANERS	70	4.61	31.23
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	950	62.50	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.66	24.84
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	30	1.97	13.79
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.66	37.26
PRECISION INSPECTORS, TESTERS AND GRADERS	60	3.95	22.92
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	10	0.66	N/A
MACHINERY MAINTENANCE MECHANICS	50	3.29	19.92
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	30	1.97	N/A
ELECTRICIANS	10	0.66	39.99
BAKERS, MANUFACTURING	50	3.29	24.84
ALL OTHER PRECISION FOOD AND TOBACCO WORKERS	20	1.32	N/A
COOKING MACHINE OPERATORS, TENDERS, FOOD, TOBACCO	40	2.63	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	260	17.11	17.39
ALL OTHER MACHINE OPERATORS AND TENDERS	70	4.61	N/A
ALL OTHER HAND WORKERS	160	10.53	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	50	3.29	25.59
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	30	1.97	22.09
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	1.97	36.59
MACHINE FEEDERS AND OFFBEARERS	10	0.66	N/A
FREIGHT,STOCK AND MATERIAL MOVERS, HAND	20	1.32	45.64
HAND PACKERS AND PACKAGERS	20	1.32	N/A
ALL OTHER CONSTRUCTION, MECHANICS,REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BAKERY PRODUCTS
SIC = 205
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4040	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	260	6.44	N/A
FINANCIAL MANAGERS	20	0.50	25.64
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.25	39.62
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	30	0.74	19.59
INDUSTRIAL PRODUCTION MANAGERS	50	1.24	23.83
GENERAL MANAGERS AND TOP EXECUTIVES	130	3.22	20.78
ALL OTHER MANAGERS AND ADMINISTRATORS	20	0.50	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	30	0.74	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.50	40.98
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.25	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	N/A	N/A
SALES AND RELATED OCCUPATIONS	670	16.58	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	80	1.98	24.66
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	40	0.99	42.28
SALESPERSONS, RETAIL TRADE	390	9.65	30.49
CASHIERS	160	3.96	30.71
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	350	8.66	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	0.74	21.85
SECRETARIES	20	0.50	29.05
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.50	28.28
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	60	1.49	18.81
PAYROLL AND TIMEKEEPING CLERKS	10	0.25	12.49
GENERAL OFFICE CLERKS	10	0.25	37.26
DATA ENTRY KEYERS, EXCEPT COMPOSING	40	0.99	25.60
ALL OTHER OFFICE MACHINE OPERATORS	10	0.25	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.25	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	130	3.22	10.55
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.74	N/A
SERVICE OCCUPATIONS	510	12.62	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	40	0.99	18.33

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BAKERY PRODUCTS
SIC = 205
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER FOOD SERVICE WORKERS	160	3.96	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	140	3.47	10.27
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	20	0.50	44.63
ALL OTHER SERVICE WORKERS	160	3.96	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2220	54.95	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.50	10.64
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	40	0.99	14.55
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.25	17.67
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.25	N/A
MACHINERY MAINTENANCE MECHANICS	90	2.23	16.54
MACHINERY MAINTENANCE WORKERS	10	0.25	39.99
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.74	45.55
AUTOMOTIVE MECHANICS	30	0.74	N/A
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	20	0.50	40.32
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	20	0.50	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.25	N/A
BAKERS, MANUFACTURING	480	11.88	21.65
ALL OTHER PRECISION FOOD AND TOBACCO WORKERS	270	6.68	N/A
ROASTNG, BAKNG, DRYNG MCH OPS, TNDRS, FOOD & TOB	40	0.99	24.51
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.25	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	20	0.50	22.78
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	120	2.97	16.52
ALL OTHER MACHINE OPERATORS AND TENDERS	80	1.98	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	120	2.97	11.89
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKER	50	1.24	41.81
DRIVER / SALES WORKERS	450	11.14	12.05
MECHANIC AND REPAIRER HELPERS	10	0.25	27.63
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	0.50	5.55
HAND PACKERS AND PACKAGERS	70	1.73	39.99
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	210	5.20	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.25	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SUGAR AND CONFECTIONERY PRODUCTS
SIC = 206
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2140	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	110	5.14	N/A
FINANCIAL MANAGERS	10	0.47	N/A
PURCHASING MANAGERS	10	0.47	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.47	9.99
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.47	N/A
INDUSTRIAL PRODUCTION MANAGERS	30	1.40	N/A
GENERAL MANAGERS AND TOP EXECUTIVES	50	2.34	8.77
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.47	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	60	2.80	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.47	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.47	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.47	20.20
MECHANICAL ENGINEERS	10	0.47	35.13
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.47	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.93	N/A
SALES AND RELATED OCCUPATIONS	60	2.80	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.47	N/A
SALESPERSONS, RETAIL TRADE	50	2.34	41.08
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	140	6.54	N/A
SECRETARIES	10	0.47	31.71
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.47	20.32
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	10	0.47	17.49
GENERAL OFFICE CLERKS	10	0.47	7.14
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.47	N/A
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.47	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.93	19.76
TRAFFIC, SHIPPING AND RECEIVING CLERKS	30	1.40	17.20
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.47	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	1.40	N/A
SERVICE OCCUPATIONS	80	3.74	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SUGAR AND CONFECTIONERY PRODUCTS
SIC = 206
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FOOD, BEVERAGE PREPARATION AND SERV. OCCUPATIONS	20	0.93	24.03
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	50	2.34	10.42
ALL OTHER SERVICE WORKERS	20	0.93	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1690	78.97	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.47	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	70	3.27	15.25
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.47	N/A
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.47	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	1.87	21.21
MACHINERY MAINTENANCE MECHANICS	70	3.27	12.67
MACHINERY MAINTENANCE WORKERS	10	0.47	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.47	23.57
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.47	N/A
ELECTRICIANS	20	0.93	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.47	N/A
MACHINISTS	10	0.47	14.14
FOOD BATCHMAKERS	100	4.67	21.41
COOKING MACHINE OPERATORS,TENDERS,FOOD,TOBACCO	40	1.87	17.30
ROASTNG, BAKNG, DRYNG MCH OPS, TNDRS, FOOD & TOB	90	4.21	28.95
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	10	0.47	12.49
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.47	42.85
CLEANING,WASHING,PICKLING EQUIPMENT OPS,TENDER	40	1.87	32.44
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	90	4.21	5.04
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	30	1.40	25.38
EXTRUDING AND OTHER MACHINE OPERATORS	40	1.87	21.82
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	210	9.81	15.74
ALL OTHER MACHINE OPERATORS AND TENDERS	30	1.40	N/A
HAND MOLDERS AND CASTERS	20	0.93	32.00
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	10	0.47	14.28
ALL OTHER HAND WORKERS	40	1.87	16.89
STATIONARY ENGINEERS	10	0.47	23.57
ALL OTHER PLANT AND SYSTEMS OPERATORS	10	0.47	28.28
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKER	10	0.47	39.99
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.47	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SUGAR AND CONFECTIONERY PRODUCTS
SIC = 206
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.47	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.47	N/A
MECHANIC AND REPAIRER HELPERS	10	0.47	19.99
MACHINE FEEDERS AND OFFBEARERS	100	4.67	29.85
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	0.93	12.02
HAND PACKERS AND PACKAGERS	210	9.81	14.82
VEHICLE WASHERS AND EQUIPMENT CLEANERS	20	0.93	48.21
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	270	12.62	16.14
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BEVERAGES
SIC = 208
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2010	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	160	7.96	N/A
FINANCIAL MANAGERS	20	1.00	13.33
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.50	N/A
PURCHASING MANAGERS	10	0.50	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	30	1.49	16.82
ADMINISTRATIVE SERVICES MANAGERS	10	0.50	40.82
INDUSTRIAL PRODUCTION MANAGERS	20	1.00	16.83
GENERAL MANAGERS AND TOP EXECUTIVES	60	2.99	11.74
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.50	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	40	1.99	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	1.00	13.92
ALL OTHER FINANCIAL SPECIALISTS	10	0.50	21.65
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.50	N/A
SALES AND RELATED OCCUPATIONS	200	9.95	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	1.49	28.48
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	130	6.47	17.64
SALESPERSONS, RETAIL TRADE	10	0.50	29.39
ALL OTHER SALES AND RELATED WORKERS	40	1.99	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	290	14.43	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	1.00	25.34
ADJUSTMENT CLERKS	10	0.50	45.17
SECRETARIES	20	1.00	22.04
RECEPTIONISTS AND INFORMATION CLERKS	10	0.50	20.32
TYPISTS	10	0.50	37.26
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.50	30.30
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	1.99	19.35
PAYROLL AND TIMEKEEPING CLERKS	10	0.50	15.97
GENERAL OFFICE CLERKS	40	1.99	21.62
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.50	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.50	18.89
ALL OTHER OFFICE MACHINE OPERATORS	10	0.50	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.50	27.95

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BEVERAGES
SIC = 208
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TRAFFIC, SHIPPING AND RECEIVING CLERKS	50	2.49	28.10
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.50	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.50	N/A
SERVICE OCCUPATIONS	40	1.99	N/A
ALL OTHER SERVICE SUPERVISORS	10	0.50	N/A
JANITORS & CLEANERS, EXC. MAIDS & HOUSE CLEANERS	30	1.49	26.22
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1270	63.18	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	1.00	11.76
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	70	3.48	20.68
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.50	40.82
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	110	5.47	38.30
MACHINERY MAINTENANCE MECHANICS	50	2.49	15.93
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	1.49	33.16
AUTOMOTIVE MECHANICS	10	0.50	15.74
BUS,TRUCK MECHANICS,DIESEL ENGINE SPECIALISTS	10	0.50	35.35
COIN AND VENDING MACHINE SERVICERS AND REPAIRERS	50	2.49	5.62
ALL OTHER PRECISION FOOD AND TOBACCO WORKERS	10	0.50	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS,TENDR	30	1.49	48.27
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	190	9.45	24.03
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.50	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	60	2.99	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	50	2.49	32.68
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKR	60	2.99	40.75
DRIVER / SALES WORKERS	90	4.48	31.61
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.50	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	110	5.47	12.18
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.50	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.50	N/A
MACHINE FEEDERS AND OFFBEARERS	20	1.00	38.12
FREIGHT,STOCK AND MATERIAL MOVERS,HAND	30	1.49	29.93
HAND PACKERS AND PACKAGERS	50	2.49	31.27
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	190	9.45	N/A
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	10	0.50	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FOODS AND KINDRED PRODUCTS
SIC = 209
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5120	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	340	6.64	N/A
FINANCIAL MANAGERS	30	0.59	13.20
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.20	N/A
PURCHASING MANAGERS	10	0.20	22.26
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	50	0.98	11.31
ADMINISTRATIVE SERVICES MANAGERS	10	0.20	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.39	N/A
INDUSTRIAL PRODUCTION MANAGERS	80	1.56	25.31
GENERAL MANAGERS AND TOP EXECUTIVES	120	2.34	16.59
ALL OTHER MANAGERS AND ADMINISTRATORS	20	0.39	14.90
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	170	3.32	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.59	45.48
ALL OTHER FINANCIAL SPECIALISTS	10	0.20	19.99
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.39	41.20
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	0.78	N/A
ALL OTHER ENGINEERS	10	0.20	N/A
BIOLOGICAL, AGRIC, FOOD TECHNOL, EXC. HEALTH	10	0.20	15.38
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	20	0.39	37.20
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.20	N/A
COMPUTER PROGRAMMERS	10	0.20	N/A
COMPUTER PROGRAMMER AIDES	10	0.20	9.09
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.20	N/A
SALES AND RELATED OCCUPATIONS	130	2.54	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	30	0.59	33.51
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	80	1.56	31.74
ALL OTHER SALES AND RELATED WORKERS	20	0.39	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	530	10.35	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.39	15.05
SECRETARIES	80	1.56	30.00
RECEPTIONISTS AND INFORMATION CLERKS	10	0.20	31.94
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.20	20.35
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	130	2.54	22.76

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FOODS AND KINDRED PRODUCTS
SIC = 209
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PAYROLL AND TIMEKEEPING CLERKS	10	0.20	28.86
GENERAL OFFICE CLERKS	30	0.59	27.27
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.20	27.21
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.20	17.32
SWITCHBOARD OPERATORS	10	0.20	28.86
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	40	0.78	41.71
TRAFFIC, SHIPPING AND RECEIVING CLERKS	110	2.15	19.73
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.20	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	0.98	N/A
SERVICE OCCUPATIONS	140	2.73	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.39	36.51
GUARDS AND WATCH GUARDS	10	0.20	N/A
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	120	2.34	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	170	3.32	N/A
GRADERS AND SORTERS, AGRICULTURAL PRODUCTS	130	2.54	31.07
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	40	0.78	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3650	71.29	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.39	30.93
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	280	5.47	48.17
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.20	14.28
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.20	N/A
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATION	100	1.95	N/A
MACHINERY MAINTENANCE MECHANICS	90	1.76	27.17
MILLWRIGHTS	10	0.20	32.27
MACHINERY MAINTENANCE WORKERS	10	0.20	35.13
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	0.98	25.87
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	20	0.39	N/A
CARPENTERS	10	0.20	30.04
ELECTRICIANS	10	0.20	16.66
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.20	33.33
MACHINISTS	10	0.20	19.99
FOOD BATCHMAKERS	80	1.56	39.52
ALL OTHER PRECISION METAL WORKERS	10	0.20	N/A
ROASTNG,BAKNG,DRYNG MCH OPS,TNDRS,FOOD & TOB	30	0.59	36.49
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.20	36.85

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FOODS AND KINDRED PRODUCTS
SIC = 209
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
COOLING AND FREEZING EQUIPMENT OPERATORS, TENDER	10	0.20	28.28
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	140	2.73	28.66
CLEANING, WASHING,PICKLING EQUIPMENT OPS,TENDER	20	0.39	N/A
SEPARTNG, FILTRNG, CLARFYNG, PRECIPTTNG, STILL	20	0.39	44.55
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	20	0.39	36.89
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	810	15.82	13.12
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.39	36.51
ALL OTHER MACHINE OPERATORS AND TENDERS	110	2.15	N/A
MEAT, POULTRY AND FISH CUTTERS AND TRIMMERS	400	7.81	32.90
ALL OTHER HAND WORKERS	160	3.13	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	30	0.59	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	120	2.34	26.37
ALL OTHER MOTOR VEHICLE OPERATORS	180	3.52	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.39	25.68
ALL OTHER HELPERS, LABORERS,MOVERS - HAND	40	0.78	N/A
HAND PACKERS AND PACKAGERS	290	5.66	38.28
ALL OTHER HELPERS,LABORERS, MATERIAL MOVERS	520	10.16	N/A
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	10	0.20	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Textile Mill Products

SIC 22

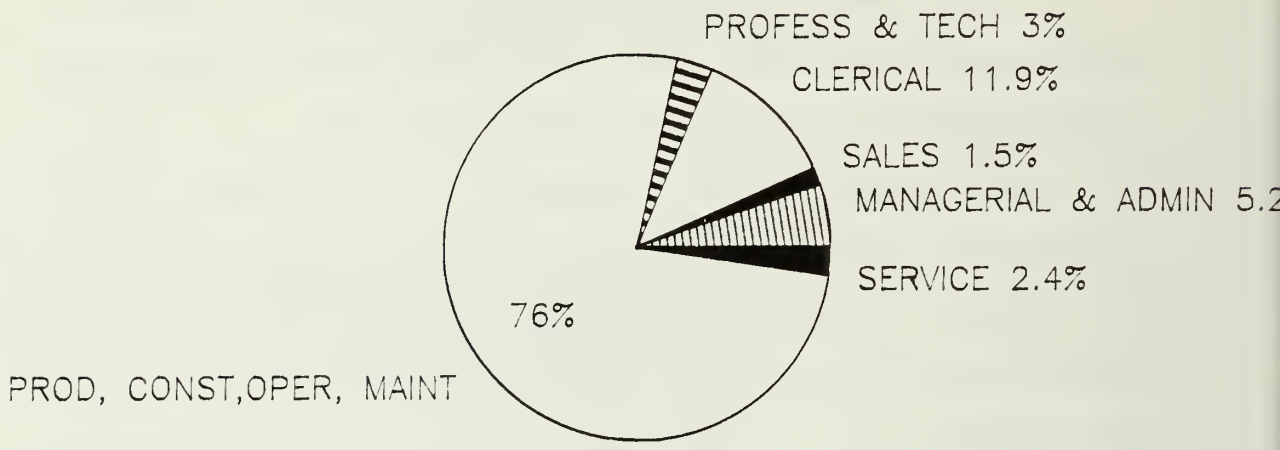
This major group includes establishments engaged in the preparation and manufacturing of yarn, thread, twine, and cordage into a finished fabric; also included are products and articles produced from yarn.

The 1986 employment level in textile mills is 10 percent lower than the 1983 employment level of 20,200 jobs. While this is still a greater drop than the 6.5 percent for nondurable goods as a whole, it does indicate a slowing of the decline when compared to the 1980-1983 period when the rate of job loss was 21 percent.

Analysis of the industry by major occupational category shows production and maintenance occupations, with 13,900 jobs, continuing to dominate the industry with 76 percent of total employment. Nine of the top ten ranked occupations are in this category with general managers and top executives in the tenth spot. The highest ranked occupation is textile machine operators and tenders with 3,730 people representing over 20 percent of textile jobs.

TEXTILE MILL PRODUCTS (SIC-22)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Textile Machine Operators and Tenders	3730
2.	Textile Bleaching, Dyeing Machine Operators, Tender	1230
3.	All Other Helpers, Laborers, Material Movers	750
4.	First Line Supervisors - Production, Operating Workers	630
5.	All Other Machine Operators and Tenders	590
6.	Production Inspectors, Tester, Graders, Sorters, Samplers, and Weighers	550
7.	Textile Machine Setters and Set - Up Operators	550
8.	Sewing Machine Operator, Garment	480
9.	Extruding, Forming Machine Operators, Tenders, Synthetic	460
10.	General Managers and Top Executives	370

OCCUPATIONS OF EMPLOYEES
TEXTILE MILL PRODUCTS
SIC = 22
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	18290	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	950	5.19	N/A
FINANCIAL MANAGERS	80	0.44	9.76
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	50	0.27	10.87
PURCHASING MANAGERS	30	0.16	12.50
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	60	0.33	14.52
ADMINISTRATIVE SERVICES MANAGERS	10	0.05	15.38
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	40	0.22	12.82
INDUSTRIAL PRODUCTION MANAGERS	200	1.09	15.27
GENERAL MANAGERS AND TOP EXECUTIVES	370	2.02	15.30
ALL OTHER MANAGERS AND ADMINISTRATORS	110	0.60	21.82
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	550	3.01	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	60	0.33	12.50
ALL OTHER FINANCIAL SPECIALISTS	10	0.05	27.27
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	0.16	14.29
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.11	37.50
COST ESTIMATORS	20	0.11	18.18
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.05	33.33
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	50	0.27	8.16
MECHANICAL ENGINEERS	40	0.22	11.11
ALL OTHER ENGINEERS	10	0.05	36.36
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	30	0.16	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.05	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	20	0.11	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	30	0.16	38.71
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	60	0.33	27.27
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	30	0.16	22.58
COMPUTER PROGRAMMERS	30	0.16	13.33
COMPUTER PROGRAMMER AIDES	30	0.16	16.00
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.05	16.67
DESIGNERS, EXCEPT INTERIOR DESIGNERS	60	0.33	24.59
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	0.16	N/A
SALES AND RELATED OCCUPATIONS	270	1.48	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	80	0.44	23.81

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TEXTILE MILL PRODUCTS
SIC = 22
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES ENGINEERS	10	0.05	25.00
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.11	30.00
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	130	0.71	30.30
SALESPERSONS, RETAIL TRADE	10	0.05	27.27
ALL OTHER SALES AND RELATED WORKERS	20	0.11	36.84
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2180	11.92	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	120	0.66	15.13
ADJUSTMENT CLERKS	100	0.55	24.24
SECRETARIES	240	1.31	16.39
RECEPTIONISTS AND INFORMATION CLERKS	30	0.16	10.71
TYPISTS	70	0.38	21.74
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.05	27.27
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	30	0.16	16.00
FILE CLERKS	40	0.22	12.82
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	60	0.33	17.74
PROCUREMENT CLERKS	20	0.11	8.33
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	230	1.26	17.03
PAYROLL AND TIMEKEEPING CLERKS	50	0.27	13.04
BILLING, COST AND RATE CLERKS	90	0.49	13.83
GENERAL OFFICE CLERKS	200	1.09	14.71
BILLING, POSTING, CALCULATING MACH. OPERATORS	50	0.27	20.83
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	50	0.27	15.22
DATA ENTRY KEYERS, EXCEPT COMPOSING	70	0.38	10.29
SWITCHBOARD OPERATORS	40	0.22	9.09
PRODUCTION, PLANNING AND EXPEDITING CLERKS	160	0.87	7.32
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	40	0.22	20.00
MARKING CLERKS	10	0.05	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	110	0.60	15.89
TRAFFIC, SHIPPING AND RECEIVING CLERKS	290	1.59	15.65
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	50	0.27	38.46
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.16	N/A
SERVICE OCCUPATIONS	430	2.35	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	140	0.77	11.11
GUARDS AND WATCH GUARDS	100	0.55	16.00
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	170	0.93	8.28
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	30	0.16	3.57
ALL OTHER SERVICE WORKERS	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TEXTILE MILL PRODUCTS
SIC = 22
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	13890	75.94	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	70	0.38	22.06
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	630	3.44	11.59
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	50	0.27	34.04
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	90	0.49	31.03
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	70	0.38	13.43
PRECISION INSPECTORS, TESTERS AND GRADERS	100	0.55	11.22
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	550	3.01	20.98
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	350	1.91	18.86
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	20	0.11	9.09
ALL OTHER MACHINERY MAINTENANCE MECHANICS	70	0.38	44.78
MILLWRIGHTS	70	0.38	14.29
MACHINERY MAINTENANCE WORKERS	90	0.49	27.91
MAINTENANCE REPAIRERS, GENERAL UTILITY	280	1.53	15.30
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	10	0.05	25.00
MENDERS	140	0.77	2.94
CARPENTERS	30	0.16	17.65
ELECTRICIANS	80	0.44	14.10
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.05	25.00
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	20	0.11	10.00
MACHINISTS	30	0.16	34.38
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	40	0.22	25.71
CUSTOM TAILORS AND SEWERS	50	0.27	42.55
PRECISION DYERS	140	0.77	23.53
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKR	60	0.33	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.11	17.65
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	50	0.27	N/A
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	30	0.16	6.45
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	290	1.59	34.38
PRINTING PRESS MACHINE OPERATORS AND TENDERS	70	0.38	39.71
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	70	0.38	N/A
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	550	3.01	22.46
TEXTILE MACHINE OPERATORS AND TENDERS	3730	20.39	9.31
EXTRUDING, FORMING MACHINE OPS, TNDRS, SYNTHETIC	460	2.52	36.17
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	100	0.55	11.11

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TEXTILE MILL PRODUCTS
SIC = 22
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	1230	6.72	10.39
SEWING MACHINE OPERATOR, GARMENT	480	2.62	21.34
SEWING MACHINE OPERATOR, NON-GARMENT	80	0.44	33.33
LAUNDRY AND DRYCLEANING MACH OPERATORS AND TENDR	10	0.05	N/A
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	90	0.49	20.93
FURNACE, KILN, ETC OPERATORS	30	0.16	10.71
BOILER OPERATORS AND TENDERS, LOW PRESSURE	90	0.49	17.78
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	60	0.33	28.07
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	40	0.22	37.50
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	160	0.87	43.04
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDR	50	0.27	25.53
CRUSHNG,GRINDNG,MIXNG & BLENDING MCH OPS,TNDR	50	0.27	48.08
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	10	0.05	N/A
EXTRUDING AND OTHER MACHINE OPERATORS	60	0.33	22.03
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	50	0.27	44.44
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	110	0.60	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	590	3.23	N/A
PRESSERS, HAND	20	0.11	N/A
HAND SEWERS	50	0.27	12.24
HAND CUTTERS AND TRIMMERS	50	0.27	28.85
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	60	0.33	47.62
ALL OTHER HAND WORKERS	110	0.60	N/A
PLANT AND SYSTEMS OCCUPATIONS	30	0.16	41.38
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	40	0.22	10.81
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKR	40	0.22	9.52
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.05	8.33
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	220	1.20	12.33
CONVEYOR OPERATORS AND TENDERS	30	0.16	15.15
MECHANIC AND REPAIRER HELPERS	30	0.16	N/A
MACHINE FEEDERS AND OFFBEARERS	260	1.42	32.43
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	320	1.75	12.89
HAND PACKERS AND PACKAGERS	290	1.59	41.05
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	750	4.10	25.99
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	0.11	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WEAVING MILLS, SYNTHETICS
SIC = 222
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2500	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	110	4.40	N/A
FINANCIAL MANAGERS	10	0.40	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.40	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.40	N/A
INDUSTRIAL PRODUCTION MANAGERS	30	1.20	N/A
GENERAL MANAGERS AND TOP EXECUTIVES	30	1.20	17.49
ALL OTHER MANAGERS AND ADMINISTRATORS	40	1.60	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	90	3.60	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.40	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.40	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.80	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.80	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.40	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.40	17.67
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.40	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.40	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.40	N/A
SALES AND RELATED OCCUPATIONS	10	0.40	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.40	N/A
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	250	10.00	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.80	N/A
ADJUSTMENT CLERKS	10	0.40	N/A
SECRETARIES	30	1.20	N/A
TYPISTS	10	0.40	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	0.80	N/A
GENERAL OFFICE CLERKS	20	0.80	11.18
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.40	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.80	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	1.20	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	1.20	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	1.60	2.38

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WEAVING MILLS, SYNTHETICS
SIC = 222
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.80	N/A
SERVICE OCCUPATIONS	70	2.80	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.80	10.64
ALL OTHER PROTECTIVE SERVICE WORKERS	10	0.40	N/A
JANITORS & CLEANERS, EXC. MAIDS & HOUSE CLEANERS	30	1.20	6.41
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.40	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1960	78.40	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.40	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	100	4.00	3.29
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.40	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	120	4.80	N/A
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	50	2.00	15.21
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.40	N/A
MILLWRIGHTS	20	0.80	N/A
MACHINERY MAINTENANCE WORKERS	10	0.40	16.66
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.80	11.18
MENDERS	50	2.00	N/A
CARPENTERS	10	0.40	N/A
ELECTRICIANS	20	0.80	N/A
MACHINISTS	10	0.40	N/A
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	10	0.40	N/A
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	30	1.20	N/A
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	210	8.40	1.08
TEXTILE MACHINE OPERATORS AND TENDERS	750	30.00	1.58
EXTRUDING, FORMING MACHINE OPS, TNDRS, SYNTHETIC	10	0.40	N/A
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	40	1.60	N/A
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	20	0.80	30.55
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	20	0.80	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	20	0.80	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	10	0.40	N/A
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	10	0.40	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.40	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	110	4.40	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WEAVING MILLS, SYNTHETICS
SIC = 222
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRESSERS, HAND	20	0.80	N/A
HAND SEWERS	10	0.40	N/A
ALL OTHER HAND WORKERS	70	2.80	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.40	23.57
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.40	N/A
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.40	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	60	2.40	N/A
CONVEYOR OPERATORS AND TENDERS	10	0.40	N/A
MACHINE FEEDERS AND OFFBEARERS	40	1.60	19.64
FREIGHT, STOCK AND MATERIAL MOVERS	40	1.60	N/A
HAND PACKERS AND PACKAGERS	10	0.40	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	70	2.80	14.13
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.40	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WEAVING AND FINISHING MILLS, WOOL
SIC = 223
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1550	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	70	4.52	N/A
FINANCIAL MANAGERS	10	0.65	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.65	N/A
INDUSTRIAL PRODUCTION MANAGERS	10	0.65	N/A
GENERAL MANAGERS AND TOP EXECUTIVES	40	2.58	4.81
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.65	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	40	2.58	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.65	N/A
ALL OTHER ENGINEERS	10	0.65	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.65	N/A
COMPUTER PROGRAMMERS	10	0.65	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.65	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.65	N/A
SALES AND RELATED OCCUPATIONS	30	1.94	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.65	14.28
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	1.29	9.42
SALESPERSONS, RETAIL TRADE	10	0.65	N/A
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	100	6.45	N/A
SECRETARIES	10	0.65	10.10
RECEPTIONISTS AND INFORMATION CLERKS	10	0.65	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	1.29	N/A
GENERAL OFFICE CLERKS	10	0.65	N/A
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.65	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	20	1.29	N/A
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.65	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.29	N/A
SERVICE OCCUPATIONS	40	2.58	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.65	N/A
GUARDS AND WATCH GUARDS	20	1.29	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WEAVING AND FINISHING MILLS, WOOL
SIC = 223
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	10	0.65	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1280	82.58	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.65	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	60	3.87	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	10	0.65	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	10	0.65	N/A
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	60	3.87	N/A
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.65	N/A
MACHINERY MAINTENANCE WORKERS	10	0.65	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	1.94	N/A
MENDERS	50	3.23	N/A
CARPENTERS	10	0.65	N/A
ELECTRICIANS	10	0.65	N/A
PRECISION DYERS	10	0.65	N/A
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	50	3.23	N/A
TEXTILE MACHINE OPERATORS AND TENDERS	670	43.23	N/A
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	10	0.65	N/A
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	40	2.58	8.05
SEWING MACHINE OPERATOR, NON-GARMENT	10	0.65	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	50	3.23	N/A
HAND SEWERS	20	1.29	N/A
ALL OTHER HAND WORKERS	40	2.58	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKR	10	0.65	N/A
MECHANIC AND REPAIRER HELPERS	10	0.65	N/A
MACHINE FEEDERS AND OFFBEARERS	20	1.29	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	1.29	7.85
HAND PACKERS AND PACKAGERS	10	0.65	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	30	1.94	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.65	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
KNITTING MILLS
SIC = 225
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3140	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	140	4.46	N/A
FINANCIAL MANAGERS	10	0.32	23.57
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.32	12.49
PURCHASING MANAGERS	10	0.32	16.66
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.32	16.66
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.32	N/A
INDUSTRIAL PRODUCTION MANAGERS	50	1.59	11.92
GENERAL MANAGERS AND TOP EXECUTIVES	40	1.27	16.85
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.32	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	90	2.87	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.32	23.57
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.32	16.66
COST ESTIMATORS	10	0.32	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.32	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.32	9.09
MECHANICAL ENGINEERS	10	0.32	N/A
ALL OTHER ENGINEERS	10	0.32	39.99
COMPUTER PROGRAMMERS	10	0.32	N/A
COMPUTER PROGRAMMER AIDES	10	0.32	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.64	15.56
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.32	N/A
SALES AND RELATED OCCUPATIONS	80	2.55	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	60	1.91	19.24
ALL OTHER SALES AND RELATED WORKERS	20	0.64	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	470	14.97	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	0.96	8.53
ADJUSTMENT CLERKS	20	0.64	6.24
SECRETARIES	20	0.64	20.20
RECEPTIONISTS AND INFORMATION CLERKS	10	0.32	9.99
TYPISTS	20	0.64	9.09
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.32	16.66
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.32	16.66

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
KNITTING MILLS
SIC = 225
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FILE CLERKS	10	0.32	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.64	14.37
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	1.27	14.42
PAYROLL AND TIMEKEEPING CLERKS	10	0.32	17.32
BILLING, COST AND RATE CLERKS	20	0.64	13.92
GENERAL OFFICE CLERKS	50	1.59	15.19
BILLING, POSTING, CALCULATING MACH. OPERATORS	10	0.32	N/A
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.32	19.24
DATA ENTRY KEYERS, EXCEPT COMPOSING	30	0.96	9.79
SWITCHBOARD OPERATORS	10	0.32	12.49
PRODUCTION, PLANNING AND EXPEDITING CLERKS	40	1.27	3.93
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.32	26.35
MARKING CLERKS	10	0.32	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.96	21.87
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	1.27	18.01
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.32	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.32	N/A
SERVICE OCCUPATIONS	190	6.05	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	90	2.87	11.89
GUARDS AND WATCH GUARDS	20	0.64	18.44
JANITORS & CLEANERS,EX. MAIDS & HOUSE CLEANERS	70	2.23	6.80
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.32	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2170	69.11	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.64	30.43
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	30	0.96	20.95
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.64	6.24
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	30	0.96	N/A
ALL OTHER INSPECTORS, TESTERS, RELATED OCC.	160	5.10	N/A
ALL OTHER MACHINERY MAINTENANCE MECHANICS	60	1.91	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	130	4.14	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.64	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.64	N/A
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKR	90	2.87	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.32	N/A
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	10	0.32	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	80	2.55	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	1120	35.67	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
KNITTING MILLS
SIC = 225
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HAND SEWERS	20	0.64	32.39
HAND CUTTERS AND TRIMMERS	40	1.27	32.23
ALL OTHER HAND WORKERS	10	0.32	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.32	14.28
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.96	16.31
CONVEYOR OPERATORS AND TENDERS	10	0.32	N/A
MECHANIC AND REPAIRER HELPERS	10	0.32	N/A
MACHINE FEEDERS AND OFFBEARERS	20	0.64	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	50	1.59	6.14
HAND PACKERS AND PACKAGERS	50	1.59	19.56
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	130	4.14	2.30
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TEXTILE FINISHING, EXCEPT WOOL
SIC = 226
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4460	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	190	4.26	N/A
FINANCIAL MANAGERS	20	0.45	13.33
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.22	15.74
PURCHASING MANAGERS	10	0.22	27.95
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.22	16.66
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.22	19.99
INDUSTRIAL PRODUCTION MANAGERS	30	0.67	16.89
GENERAL MANAGERS AND TOP EXECUTIVES	80	1.79	27.88
ALL OTHER MANAGERS AND ADMINISTRATORS	30	0.67	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	150	3.36	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.22	9.09
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.22	16.66
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.22	28.86
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.22	19.99
MECHANICAL ENGINEERS	10	0.22	16.66
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.22	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.22	24.49
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	30	0.67	26.03
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.22	37.41
COMPUTER PROGRAMMERS	10	0.22	22.26
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.45	42.49
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.45	N/A
SALES AND RELATED OCCUPATIONS	50	1.12	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.22	16.66
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	30	0.67	29.88
ALL OTHER SALES AND RELATED WORKERS	10	0.22	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	540	12.11	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	0.67	15.56
ADJUSTMENT CLERKS	20	0.45	23.53
SECRETARIES	40	0.90	11.80
TYPISTS	20	0.45	28.28
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.22	22.22

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TEXTILE FINISHING, EXCEPT WOOL
SIC = 226
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FILE CLERKS	20	0.45	10.64
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.45	19.50
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	0.90	10.46
PAYROLL AND TIMEKEEPING CLERKS	10	0.22	16.66
BILLING, COST AND RATE CLERKS	40	0.90	14.16
GENERAL OFFICE CLERKS	70	1.57	17.92
BILLING, POSTING, CALCULATING MACH. OPERATORS	30	0.67	26.70
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.22	24.49
SWITCHBOARD OPERATORS	10	0.22	10.10
PRODUCTION, PLANNING AND EXPEDITING CLERKS	50	1.12	11.54
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	20	0.45	18.97
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.45	32.47
TRAFFIC, SHIPPING AND RECEIVING CLERKS	60	1.35	19.37
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.22	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.45	N/A
SERVICE OCCUPATIONS	50	1.12	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.22	13.32
GUARDS AND WATCH GUARDS	10	0.22	N/A
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	30	0.67	8.94
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3480	78.03	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.22	15.38
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	160	3.59	10.39
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	70	1.57	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	10	0.22	12.37
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	180	4.04	19.55
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	60	1.35	19.56
MILLWRIGHTS	10	0.22	22.36
MACHINERY MAINTENANCE WORKERS	20	0.45	48.53
MAINTENANCE REPAIRERS, GENERAL UTILITY	70	1.57	18.57
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.22	N/A
CARPENTERS	10	0.22	36.85
ELECTRICIANS	30	0.67	15.49
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.22	19.99
PRECISION DYERS	80	1.79	20.69
A O PRECISION TEXTILE,APPAREL,FURNISHNGS WORKR	30	0.67	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.45	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TEXTILE FINISHING, EXCEPT WOOL
SIC = 226
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	30	0.67	N/A
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	190	4.26	26.83
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	40	0.90	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	60	1.35	48.88
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	70	1.57	N/A
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	120	2.69	48.55
TEXTILE MACHINE OPERATORS AND TENDERS	250	5.61	27.21
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	970	21.75	8.96
SEWING MACHINE OPERATOR, NON-GARMENT	10	0.22	25.51
BOILER OPERATORS AND TENDERS, LOW PRESSURE	50	1.12	13.98
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	30	0.67	48.41
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	1.12	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	290	6.50	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.22	41.45
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.22	11.11
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKR	10	0.22	9.99
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.22	14.28
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	90	2.02	9.84
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.22	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.22	N/A
MACHINE FEEDERS AND OFFBEARERS	160	3.59	41.03
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	80	1.79	13.19
HAND PACKERS AND PACKAGERS	50	1.12	14.77
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	130	2.91	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
YARN AND THREAD MILLS
SIC = 228
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1120	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	60	5.36	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.89	N/A
INDUSTRIAL PRODUCTION MANAGERS	10	0.89	15.97
GENERAL MANAGERS AND TOP EXECUTIVES	30	2.68	10.49
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.89	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	20	1.79	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	1.79	N/A
SALES AND RELATED OCCUPATIONS	30	2.68	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	30	2.68	11.84
ALL OTHER SALES AND RELATED WORKERS	10	0.89	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	120	10.71	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.89	12.49
ADJUSTMENT CLERKS	20	1.79	13.46
SECRETARIES	20	1.79	18.44
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	10	0.89	19.99
BILLING, COST AND RATE CLERKS	10	0.89	N/A
GENERAL OFFICE CLERKS	10	0.89	22.04
TRAFFIC, SHIPPING AND RECEIVING CLERKS	30	2.68	12.43
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.89	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.89	N/A
SERVICE OCCUPATIONS	10	0.89	N/A
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	10	0.89	N/A
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	880	78.57	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	60	5.36	11.11
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.89	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	20	1.79	12.29
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	30	2.68	6.89

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
YARN AND THREAD MILLS
SIC = 228
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.89	15.71
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKR	20	1.79	N/A
TEXTILE MACHINE OPERATORS AND TENDERS	460	41.07	4.98
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	10	0.89	36.89
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	10	0.89	22.22
FURNACE, KILN, ETC OPERATORS	10	0.89	15.71
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.89	16.66
EXTRUDING AND OTHER MACHINE OPERATORS	60	5.36	21.83
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	4.46	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	20	1.79	N/A
HAND CUTTERS AND TRIMMERS	10	0.89	20.32
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	20	1.79	15.30
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	40	3.57	14.28
HAND PACKERS AND PACKAGERS	30	2.68	15.15
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.89	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS TEXTILE PRODUCTS
SIC = 229
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4120	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	300	7.28	N/A
FINANCIAL MANAGERS	30	0.73	10.54
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.49	12.89
PURCHASING MANAGERS	10	0.24	15.71
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	30	0.73	18.04
ADMINISTRATIVE SERVICES MANAGERS	10	0.24	34.64
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.49	22.53
INDUSTRIAL PRODUCTION MANAGERS	40	0.97	16.83
GENERAL MANAGERS AND TOP EXECUTIVES	110	2.67	9.70
ALL OTHER MANAGERS AND ADMINISTRATORS	40	0.97	33.43
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	150	3.64	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.49	22.36
ALL OTHER FINANCIAL SPECIALISTS	10	0.24	28.74
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.24	27.21
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.24	28.86
COST ESTIMATORS	10	0.24	28.86
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.24	16.66
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.24	17.67
MECHANICAL ENGINEERS	20	0.49	19.50
ALL OTHER ENGINEERS	10	0.24	34.64
ALL OTHER PHYSICAL SCIENTISTS	20	0.49	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	20	0.49	38.29
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.24	26.35
COMPUTER PROGRAMMERS	10	0.24	48.98
COMPUTER PROGRAMMER AIDES	10	0.24	34.01
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	N/A	N/A
SALES AND RELATED OCCUPATIONS	60	1.46	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.24	44.09
SALES ENGINEERS	10	0.24	34.64
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.24	44.09
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	30	0.73	36.84
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	550	13.35	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS TEXTILE PRODUCTS
SIC = 229
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	0.73	22.85
ADJUSTMENT CLERKS	30	0.73	41.22
SECRETARIES	90	2.18	20.36
RECEPTIONISTS AND INFORMATION CLERKS	10	0.24	17.67
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.24	16.66
FILE CLERKS	10	0.24	44.09
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.49	24.28
PROCUREMENT CLERKS	10	0.24	15.71
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	100	2.43	26.04
PAYROLL AND TIMEKEEPING CLERKS	10	0.24	14.43
BILLING, COST AND RATE CLERKS	30	0.73	19.23
GENERAL OFFICE CLERKS	30	0.73	20.00
BILLING, POSTING, CALCULATING MACH. OPERATORS	10	0.24	28.28
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.24	28.28
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.49	27.34
SWITCHBOARD OPERATORS	10	0.24	14.14
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	0.73	16.82
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.49	29.31
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	1.70	20.98
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.24	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.49	N/A
SERVICE OCCUPATIONS	60	1.46	N/A
GUARDS AND WATCH GUARDS	30	0.73	24.03
JANITORS & CLEANERS, EXC. MAIDS & HOUSE CLEANERS	20	0.49	20.83
ALL OTHER SERVICE WORKERS	10	0.24	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3010	73.06	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.49	27.48
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	180	4.37	13.35
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	70	1.70	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	40	0.97	25.07
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	50	1.21	28.78
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	70	1.70	23.71
ALL OTHER MACHINERY MAINTENANCE MECHANICS	30	0.73	32.49
MILLWRIGHTS	10	0.24	40.82
MACHINERY MAINTENANCE WORKERS	30	0.73	31.09
MAINTENANCE REPAIRERS, GENERAL UTILITY	100	2.43	16.50

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS TEXTILE PRODUCTS
SIC = 229
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CARPENTERS	10	0.24	23.57
ELECTRICIANS	20	0.49	19.24
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.24	N/A
MACHINISTS	10	0.24	44.72
PRECISION DYERS	10	0.24	40.06
A O PRECISION TEXTILE,APPAREL,FURNISHNGS WORKR	10	0.24	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	30	0.73	N/A
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	110	2.67	32.30
TEXTILE MACHINE OPERATORS AND TENDERS	760	18.45	17.06
EXTRUDING, FORMING MACHINE OPS, TNDRS, SYNTHETIC	370	8.98	40.99
BOILER OPERATORS AND TENDERS, LOW PRESSURE	20	0.49	30.42
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	30	0.73	33.98
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	40	0.97	27.64
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	120	2.91	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	250	6.07	N/A
ALL OTHER HAND WORKERS	50	1.21	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	10	0.24	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.24	24.84
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKR	10	0.24	22.04
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	50	1.21	27.60
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	40	0.97	33.79
HAND PACKERS AND PACKAGERS	50	1.21	32.00
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	410	9.95	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Apparel and Other Textile Products

SIC 23

This major group, known as the cutting-up and needle trades, includes establishments producing clothing and fabricating products by cutting and sewing purchased woven or knit textile fabrics and related material such as leather, rubberized fabrics, plastics and furs.

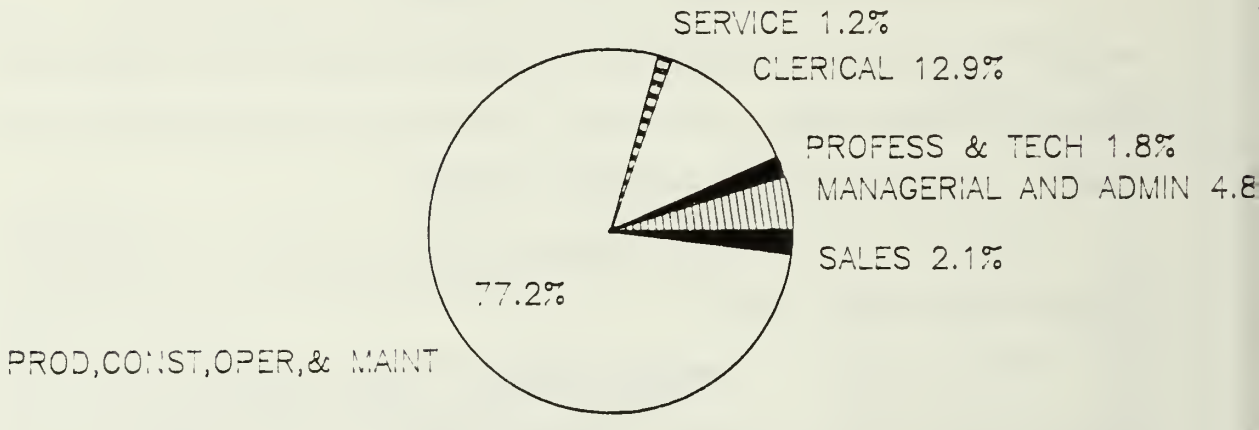
Employment in the apparel industry which stood at 36,000 in 1983 declined to 28,000 in 1986.

This approximate 22 percent industry job loss continues a trend in effect for more than a decade. Foreign competition, automation, and the cost of labor have been cited as some of the contributing factors for this industry's employment decline.

The occupations within the apparel industry are largely concentrated within the production and maintenance category (over 77 percent of all occupations). This high level of workers in the production and maintenance category exists throughout all of the defined apparel industries. Nearly 50 percent of workers in this category are sewing machine operators.

APPAREL AND OTHER TEXTILE PRODUCTS (SIC-23)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Sewing Machine Operator, Garment	10670
2.	Sewing Machine Operator, Non-Garment	2340
3.	Pressing Machine Operator, Textile, Garment & Related	930
4.	Hand Cutters and Trimmers	870
5.	Traffic, Shipping and Receiving Clerks	820
6.	General Managers and Top Executives	660
7.	All Other Helpers, Laborers, Material Movers	660
8.	First Line Supervisors - Production, Operating Workers	610
9.	Textile Machine Operators and Tenders	590
10.	Hand Packers and Packagers	520

OCCUPATIONS OF EMPLOYEES
APPAREL AND OTHER TEXTILE PRODUCTS
SIC = 23
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	28300	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1360	4.81	N/A
FINANCIAL MANAGERS	80	0.28	25.93
PURCHASING MANAGERS	30	0.11	11.54
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	50	0.18	32.61
ADMINISTRATIVE SERVICES MANAGERS	30	0.11	37.04
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.11	37.04
INDUSTRIAL PRODUCTION MANAGERS	330	1.17	25.38
GENERAL MANAGERS AND TOP EXECUTIVES	660	2.33	17.73
ALL OTHER MANAGERS AND ADMINISTRATORS	160	0.57	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	520	1.84	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.11	23.08
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	0.11	41.94
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.07	16.67
COST ESTIMATORS	20	0.07	8.33
ALL OTHER MANAGEMENT SUPPORT WORKERS	170	0.60	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.07	20.00
MECHANICAL ENGINEERS	10	0.04	N/A
ALL OTHER ENGINEERS	20	0.07	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.11	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.04	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	20	0.07	6.25
COMPUTER PROGRAMMERS	30	0.11	6.90
COMPUTER PROGRAMMER AIDES	20	0.07	18.75
DESIGNERS, EXCEPT INTERIOR DESIGNERS	100	0.35	42.27
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.04	N/A
SALES AND RELATED OCCUPATIONS	600	2.12	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	100	0.35	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.04	14.29
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	300	1.06	48.66
SALESPERSONS, RETAIL TRADE	180	0.64	44.26
ALL OTHER SALES AND RELATED WORKERS	10	0.04	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	3660	12.93	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
APPAREL AND OTHER TEXTILE PRODUCTS
SIC = 23
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	140	0.49	19.85
ADJUSTMENT CLERKS	80	0.28	23.08
SECRETARIES	230	0.81	35.78
RECEPTIONISTS AND INFORMATION CLERKS	30	0.11	36.36
TYPISTS	40	0.14	36.59
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.07	13.64
FILE CLERKS	30	0.11	33.33
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	150	0.53	48.98
PROCUREMENT CLERKS	20	0.07	29.41
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	480	1.70	26.67
PAYROLL AND TIMEKEEPING CLERKS	110	0.39	21.10
BILLING, COST AND RATE CLERKS	50	0.18	30.00
GENERAL OFFICE CLERKS	500	1.77	32.21
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	30	0.11	12.50
DATA ENTRY KEYERS, EXCEPT COMPOSING	100	0.35	16.83
ALL OTHER OFFICE MACHINE OPERATORS	50	0.18	N/A
SWITCHBOARD OPERATORS	30	0.11	25.81
PRODUCTION, PLANNING AND EXPEDITING CLERKS	140	0.49	22.38
MARKING CLERKS	80	0.28	21.25
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	380	1.34	43.42
TRAFFIC, SHIPPING AND RECEIVING CLERKS	820	2.90	25.37
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	80	0.28	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	70	0.25	N/A
SERVICE OCCUPATIONS	330	1.17	N/A
ALL OTHER SERVICE SUPERVISORS	130	0.46	N/A
GUARDS AND WATCH GUARDS	30	0.11	N/A
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	160	0.57	15.53
ALL OTHER SERVICE WORKERS	10	0.04	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	21840	77.17	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.07	4.76
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	610	2.16	19.44
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.04	N/A
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	50	0.18	6.67
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.04	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	100	0.35	28.16
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	460	1.63	33.41

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
APPAREL AND OTHER TEXTILE PRODUCTS
SIC = 23
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	20	0.07	N/A
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	170	0.60	30.06
ALL OTHER MACHINERY MAINTENANCE MECHANICS	20	0.07	23.81
MILLWRIGHTS	10	0.04	N/A
MACHINERY MAINTENANCE WORKERS	30	0.11	3.85
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	0.18	33.96
MENDERS	50	0.18	47.92
CARPENTERS	20	0.07	38.10
ELECTRICIANS	10	0.04	18.18
MACHINISTS	10	0.04	36.36
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	280	0.99	46.10
CUSTOM TAILORS AND SEWERS	150	0.53	39.22
PRECISION DYERS	10	0.04	N/A
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKE	240	0.85	N/A
ALL OTHER PRECISION METAL WORKERS	60	0.21	19.35
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	60	0.21	N/A
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	70	0.25	40.91
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	30	0.11	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	30	0.11	37.93
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	30	0.11	40.00
TEXTILE MACHINE OPERATORS AND TENDERS	590	2.08	45.41
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	10	0.04	N/A
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	110	0.39	5.61
SEWING MACHINE OPERATOR, GARMENT	10670	37.70	8.91
SEWING MACHINE OPERATOR, NON-GARMENT	2340	8.27	22.46
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	930	3.29	15.85
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.04	N/A
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	50	0.18	37.74
EXTRUDING AND OTHER MACHINE OPERATORS	10	0.04	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	20	0.07	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	110	0.39	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	60	0.21	N/A
PRESSERS, HAND	260	0.92	27.86
HAND SEWERS	330	1.17	26.30
HAND CUTTERS AND TRIMMERS	870	3.07	27.88
PORTABLE MACHINE CUTTERS	160	0.57	41.46
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC.	440	1.55	34.91
ALL OTHER HAND WORKERS	280	0.99	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	0.07	28.57
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKE	30	0.11	29.63
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.07	22.73

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
APPAREL AND OTHER TEXTILE PRODUCTS
SIC = 23
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CONVEYOR OPERATORS AND TENDERS	20	0.07	25.00
MACHINE FEEDERS AND OFFBEARERS	90	0.32	46.15
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	500	1.77	35.79
HAND PACKERS AND PACKAGERS	520	1.84	20.04
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	660	2.33	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	150	0.53	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MEN'S AND BOYS' SUITS AND COATS
SIC = 231
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4060	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	130	3.20	N/A
FINANCIAL MANAGERS	10	0.25	N/A
PERSONNEL. TRAINING AND LABOR RELATION MANAGERS	10	0.25	N/A
PURCHASING MANAGERS	10	0.25	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.25	N/A
INDUSTRIAL PRODUCTION MANAGERS	30	0.74	N/A
GENERAL MANAGERS AND TOP EXECUTIVES	60	1.48	2.48
ALL OTHER MANAGERS AND ADMINISTRATORS	20	0.49	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	60	1.48	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.25	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.49	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.25	N/A
COMPUTER PROGRAMMERS	10	0.25	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.49	14.90
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.25	N/A
SALES AND RELATED OCCUPATIONS	30	0.74	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC.RETAIL	10	0.25	15.97
SALESPERSONS, RETAIL TRADE	10	0.25	14.43
ALL OTHER SALES AND RELATED WORKERS	10	0.25	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	350	8.62	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.49	9.42
ADJUSTMENT CLERKS	10	0.25	12.49
SECRETARIES	30	0.74	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.25	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	0.74	10.47
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	0.49	5.55
PAYROLL AND TIMEKEEPING CLERKS	20	0.49	N/A
BILLING, COST AND RATE CLERKS	10	0.25	N/A
GENERAL OFFICE CLERKS	90	2.22	4.38
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.25	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.49	8.83

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MEN'S AND BOYS' SUITS AND COATS
SIC = 231
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SWITCHBOARD OPERATORS	10	0.25	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.25	N/A
MARKING CLERKS	10	0.25	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	50	1.23	16.95
TRAFFIC, SHIPPING AND RECEIVING CLERKS	30	0.74	6.18
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.25	N/A
SERVICE OCCUPATIONS	50	1.23	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.25	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	40	0.99	4.04
ALL OTHER SERVICE WORKERS	*	*	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3430	84.48	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	100	2.46	3.13
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.25	9.99
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	0.99	2.27
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	20	0.49	4.16
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.25	N/A
MENDERS	10	0.25	N/A
ALL OTHER CONSTRUCTION TRADES WORKERS	10	0.25	N/A
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	20	0.49	4.99
CUSTOM TAILORS AND SEWERS	30	0.74	14.99
PRESSERS	10	0.25	N/A
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKR	10	0.25	N/A
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	30	0.74	27.77
TEXTILE MACHINE OPERATORS AND TENDERS	10	0.25	28.86
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	10	0.25	N/A
SEWING MACHINE OPERATOR, GARMENT	2140	52.71	1.73
SEWING MACHINE OPERATOR, NON-GARMENT	20	0.49	44.12
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	320	7.88	4.19
PRESSERS, HAND	30	0.74	5.58
HAND SEWERS	50	1.23	7.63
HAND CUTTERS AND TRIMMERS	160	3.94	10.26
PORTABLE MACHINE CUTTERS	30	0.74	7.71
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC.	70	1.72	10.23
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.25	N/A
CONVEYOR OPERATORS AND TENDERS	10	0.25	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

MEN'S AND BOYS' SUITS AND COATS
SIC = 231
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FEEDERS AND OFFBEARERS	10	0.25	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	70	1.72	1.91
HAND PACKERS AND PACKAGERS	20	0.49	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	140	3.45	2.17
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	0.49	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WOMEN'S AND MISSES' OUTERWEAR
SIC = 233
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	9520	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	520	5.46	N/A
FINANCIAL MANAGERS	20	0.21	44.72
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.11	40.82
INDUSTRIAL PRODUCTION MANAGERS	190	2.00	29.09
GENERAL MANAGERS AND TOP EXECUTIVES	260	2.73	22.72
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.53	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	100	1.05	N/A
COST ESTIMATORS	10	0.11	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	50	0.53	N/A
ALL OTHER ENGINEERS	10	0.11	N/A
COMPUTER PROGRAMMER AIDES	10	0.11	N/A
ALL OTHER MATHEMATICAL SCIENTISTS	10	0.11	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.21	N/A
SALES AND RELATED OCCUPATIONS	230	2.42	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.21	42.59
SALESPERSONS, RETAIL TRADE	110	1.16	43.34
ALL OTHER SALES AND RELATED WORKERS	100	1.05	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1500	15.76	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.53	27.57
ADJUSTMENT CLERKS	10	0.11	45.17
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	280	2.94	27.63
PAYROLL AND TIMEKEEPING CLERKS	30	0.32	35.49
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.11	N/A
ALL OTHER OFFICE MACHINE OPERATORS	40	0.42	N/A
ALL OTHER COMMUNICATIONS EQUIPMENT OPERATORS	10	0.11	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.21	38.07
MARKING CLERKS	20	0.21	24.59
TRAFFIC, SHIPPING AND RECEIVING CLERKS	410	4.31	36.92
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	200	2.10	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	410	4.31	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WOMEN'S AND MISSES' OUTERWEAR
SIC = 233
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SERVICE OCCUPATIONS	60	0.63	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.21	49.99
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	40	0.42	25.51
ALL OTHER SERVICE WORKERS	*	*	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	7120	74.79	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	200	2.10	25.69
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	20	0.21	N/A
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.11	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	20	0.21	28.86
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	150	1.58	34.55
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	20	0.21	29.80
A O COMMUNICATIONS EQUIPMENT MECHANICS, INSTALLE	10	0.11	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.11	N/A
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKE	270	2.84	N/A
ALL OTHER PRECISION METAL WORKERS	40	0.42	N/A
SEWING MACHINE OPERATOR, GARMENT	4010	42.12	10.43
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	300	3.15	23.28
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	20	0.21	39.37
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	40	0.42	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	760	7.98	N/A
PRESSERS, HAND	110	1.16	47.86
HAND CUTTERS AND TRIMMERS	300	3.15	22.86
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	80	0.84	23.84
ALL OTHER HAND WORKERS	300	3.15	N/A
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.11	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	30	0.32	N/A
HAND PACKERS AND PACKAGERS	60	0.63	33.47
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	170	1.79	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	200	2.10	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WOMEN'S AND CHILDREN'S UNDERGARMENTS
SIC = 234
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1870	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	50	2.67	N/A
FINANCIAL MANAGERS	10	0.53	23.57
INDUSTRIAL PRODUCTION MANAGERS	10	0.53	8.33
GENERAL MANAGERS AND TOP EXECUTIVES	20	1.07	8.31
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.53	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	30	1.60	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.53	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.53	N/A
ALL OTHER MATHEMATICAL SCIENTISTS	10	0.53	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.53	35.13
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	*	N/A
SALES AND RELATED OCCUPATIONS	10	0.53	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	10	0.53	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	240	12.83	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.53	36.42
SECRETARIES	10	0.53	15.71
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.53	24.84
PROCUREMENT CLERKS	10	0.53	34.64
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	1.07	18.70
PAYROLL AND TIMEKEEPING CLERKS	10	0.53	22.36
GENERAL OFFICE CLERKS	10	0.53	20.20
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.53	14.28
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.53	31.49
MARKING CLERKS	10	0.53	40.82
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.53	25.71
TRAFFIC, SHIPPING AND RECEIVING CLERKS	80	4.28	9.30
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	1.07	30.90
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.07	N/A
SERVICE OCCUPATIONS	20	1.07	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
WOMEN'S AND CHILDREN'S UNDERGARMENTS
SIC = 234
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.53	41.23
JANITORS & CLEANERS, EX. MAIDS & HOUSE CLEANERS	10	0.53	19.24
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1530	81.82	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	30	1.60	24.01
PRECISION INSPECTORS, TESTERS AND GRADERS	60	3.21	36.28
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	10	0.53	20.32
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.53	24.74
MENDERS	10	0.53	16.66
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	60	3.21	31.82
PRESSERS	10	0.53	47.38
ALL OTHER PRECISION METAL WORKERS	10	0.53	35.71
SEWING MACHINE OPERATOR, GARMENT	1100	58.82	2.68
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.53	N/A
PRESSERS, HAND	20	1.07	49.88
HAND SEWERS	40	2.14	32.86
HAND CUTTERS AND TRIMMERS	40	2.14	20.98
PORTABLE MACHINE CUTTERS	20	1.07	35.90
ALL OTHER HAND WORKERS	10	0.53	N/A
CONVEYOR OPERATORS AND TENDERS	10	0.53	47.95
FREIGHT. STOCK AND MATERIAL MOVERS, HAND	10	0.53	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	10	0.53	N/A
HAND PACKERS AND PACKAGERS	30	1.60	10.58
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	50	2.67	10.60
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.53	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS APPAREL AND ACCESSORIES
SIC = 238
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1850	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	140	7.57	N/A
FINANCIAL MANAGERS	10	0.54	N/A
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.54	N/A
PURCHASING MANAGERS	10	0.54	35.35
INDUSTRIAL PRODUCTION MANAGERS	10	0.54	36.32
GENERAL MANAGERS AND TOP EXECUTIVES	60	3.24	13.64
ALL OTHER MANAGERS AND ADMINISTRATORS	50	2.70	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	70	3.78	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.54	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.54	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.54	N/A
ALL OTHER ENGINEERS	10	0.54	N/A
COMPUTER PROGRAMMERS	10	0.54	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	30	1.62	24.94
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.54	N/A
SALES AND RELATED OCCUPATIONS	50	2.70	N/A
SALESPERSONS, RETAIL TRADE	30	1.62	43.75
ALL OTHER SALES AND RELATED WORKERS	20	1.08	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	240	12.97	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.54	N/A
ADJUSTMENT CLERKS	10	0.54	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	30	1.62	10.49
PAYROLL AND TIMEKEEPING CLERKS	10	0.54	20.20
GENERAL OFFICE CLERKS	40	2.16	33.72
ALL OTHER OFFICE MACHINE OPERATORS	10	0.54	N/A
ALL OTHER COMMUNICATIONS EQUIPMENT OPERATORS	10	0.54	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	50	2.70	40.15
TRAFFIC, SHIPPING AND RECEIVING CLERKS	20	1.08	10.64
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	1.08	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	1.62	N/A
SERVICE OCCUPATIONS	30	1.62	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS APPAREL AND ACCESSORIES
SIC = 238
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT 1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SERVICE SUPERVISORS	20	1.08	N/A
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	10	0.54	18.18
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1320	71.35	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	50	2.70	5.65
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	20	1.08	22.11
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	10	0.54	47.38
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.54	N/A
CUSTOM TAILORS AND SEWERS	30	1.62	20.10
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKE	80	4.32	N/A
TEXTILE MACHINE SETTERS AND SET-UP OPERATORS	10	0.54	N/A
TEXTILE MACHINE OPERATORS AND TENDERS	30	1.62	N/A
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	10	0.54	N/A
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	10	0.54	N/A
SEWING MACHINE OPERATOR, GARMENT	520	28.11	19.34
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	20	1.08	43.70
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.54	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	30	1.62	N/A
PRESSERS, HAND	10	0.54	10.87
HAND SEWERS	30	1.62	N/A
HAND CUTTERS AND TRIMMERS	20	1.08	14.88
PORTABLE MACHINE CUTTERS	20	1.08	34.80
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	230	12.43	47.55
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.54	N/A
MACHINE FEEDERS AND OFFBEARERS	20	1.08	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	1.08	18.44
HAND PACKERS AND PACKAGERS	50	2.70	31.74
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	60	3.24	38.51
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FABRICATED TEXTILE PRODUCTS
SIC = 239
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	7220	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	380	5.26	N/A
FINANCIAL MANAGERS	30	0.42	22.07
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.14	28.86
PURCHASING MANAGERS	10	0.14	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.28	36.26
ADMINISTRATIVE SERVICES MANAGERS	10	0.14	11.78
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.14	41.57
INDUSTRIAL PRODUCTION MANAGERS	60	0.83	20.30
GENERAL MANAGERS AND TOP EXECUTIVES	190	2.63	19.77
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.69	32.75
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	160	2.22	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.14	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.14	N/A
COST ESTIMATORS	10	0.14	14.43
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	0.55	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.14	N/A
MECHANICAL ENGINEERS	10	0.14	N/A
ALL OTHER ENGINEERS	10	0.14	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	20	0.28	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.14	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.14	16.66
COMPUTER PROGRAMMERS	10	0.14	9.99
COMPUTER PROGRAMMER AIDES	10	0.14	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.28	N/A
SALES AND RELATED OCCUPATIONS	200	2.77	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.28	7.07
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	160	2.22	38.93
SALESPERSONS, RETAIL TRADE	10	0.14	N/A
ALL OTHER SALES AND RELATED WORKERS	10	0.14	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1030	14.27	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	40	0.55	15.58
ADJUSTMENT CLERKS	40	0.55	29.34

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FABRICATED TEXTILE PRODUCTS
SIC = 239
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SECRETARIES	90	1.25	29.38
RECEPTIONISTS AND INFORMATION CLERKS	10	0.14	30.30
TYPISTS	20	0.28	32.77
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.14	N/A
FILE CLERKS	20	0.28	9.42
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	50	0.69	42.09
PROCUREMENT CLERKS	10	0.14	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	100	1.39	31.93
PAYROLL AND TIMEKEEPING CLERKS	30	0.42	20.81
BILLING, COST AND RATE CLERKS	20	0.28	20.78
GENERAL OFFICE CLERKS	100	1.39	7.43
BILLING, POSTING, CALCULATING MACH. OPERATORS	10	0.14	N/A
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.14	25.51
DATA ENTRY KEYERS, EXCEPT COMPOSING	50	0.69	16.66
SWITCHBOARD OPERATORS	10	0.14	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	90	1.25	12.81
MARKING CLERKS	40	0.55	5.40
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	60	0.83	34.92
TRAFFIC, SHIPPING AND RECEIVING CLERKS	200	2.77	12.12
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	30	0.42	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	*	N/A	N/A
SERVICE OCCUPATIONS	80	1.11	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.28	48.07
GUARDS AND WATCH GUARDS	10	0.14	N/A
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	50	0.69	10.53
ALL OTHER SERVICE WORKERS	10	0.14	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5380	74.52	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.14	11.11
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	190	2.63	20.50
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.14	N/A
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	20	0.28	10.18
PRECISION INSPECTORS, TESTERS AND GRADERS	10	0.14	N/A
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	190	2.63	22.75
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	20	0.28	N/A
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	80	1.11	36.38
ALL OTHER MACHINERY MAINTENANCE MECHANICS	20	0.28	19.50
MILLWRIGHTS	10	0.14	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FABRICATED TEXTILE PRODUCTS
SIC = 239
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINERY MAINTENANCE WORKERS	30	0.42	3.99
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.14	25.51
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	150	2.08	N/A
CARPENTERS	10	0.14	25.51
ELECTRICIANS	10	0.14	30.61
MACHINISTS	10	0.14	32.77
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	80	1.11	47.73
PRECISION DYERS	10	0.14	N/A
A O PRECISION TEXTILE, APPAREL,FURNISHNGS WORKERS	20	0.28	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.14	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	60	0.83	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	60	0.83	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	30	0.42	38.24
TEXTILE MACHINE OPERATORS AND TENDERS	230	3.19	11.07
TEXTILE BLEACHING, DYEING MACH OPERATORS, TENDER	100	1.39	5.95
SEWING MACHINE OPERATOR, GARMENT	960	13.30	26.64
SEWING MACHINE OPERATOR, NON-GARMENT	1840	25.48	13.72
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.14	N/A
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	20	0.28	25.45
EXTRUDING AND OTHER MACHINE OPERATORS	10	0.14	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	20	0.28	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	0.69	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	30	0.42	N/A
PRESSERS, HAND	70	0.97	7.69
HAND SEWERS	40	0.55	5.40
HAND CUTTERS AND TRIMMERS	170	2.35	32.71
ALL OTHER HAND WORKERS	120	1.66	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.14	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.14	29.45
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.14	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	150	2.08	31.31
HAND PACKERS AND PACKAGERS	300	4.16	18.16
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	230	3.19	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Lumber and Wood Products

SIC 24

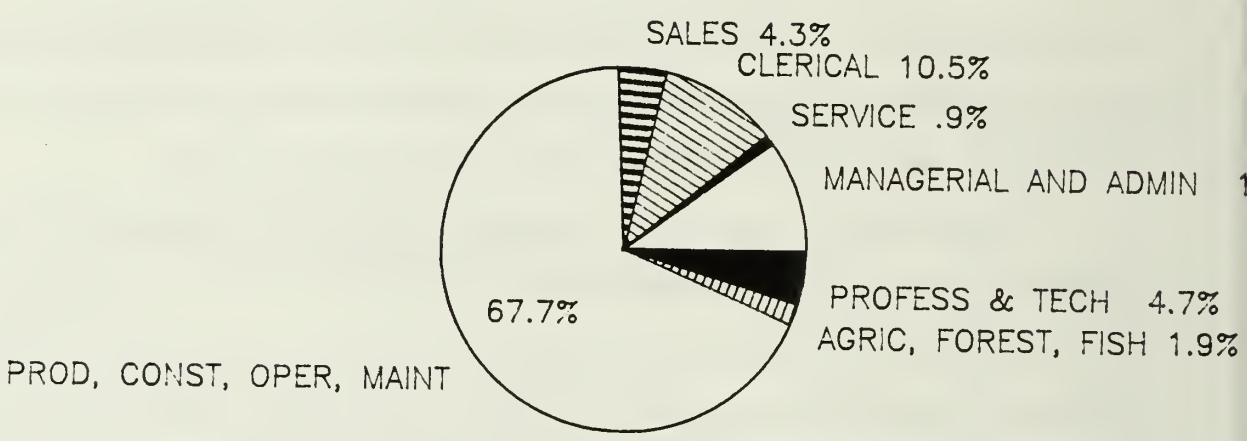
This major group includes logging camps ,sawmills, lathe mills, shingle mills, planing mills, plywood mills,veneer mills and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes (excluding furniture, musical instruments or toys).

The employment level in this industry increased 11 percent, from 4,800 workers in 1983 to 5,300 workers in 1986.

Production and maintenance occupations, with 67.7 percent of the total employment, dominate the industry. Within this category, the occupations of assemblers and fabricators except machine electrical, 560 workers, and cabinetmakers and bench carpenters, 550 workers, account for 31 percent of the jobs. Various machine operators and tenders occupations represent 26 percent of the jobs in the category.

LUMBER AND WOOD PRODUCTS (SIC-24)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Assemblers, Fabricators, Except Machine Electrical & Electronic	560
2.	Cabinetmakers and Bench Carpenter	550
3.	Woodworking Machine Operators and Tenders	420
4.	General Managers and Top Executives	360
5.	Wood Machinists	250
6.	Carpenters	240
7.	All Other Machine Operators and Tenders	220
8.	First Line Supervisors - Prodcution, Operating Workers	210
9.	Freight, Stock and Material Movers, Hand	210

OCCUPATIONS OF EMPLOYEES
LUMBER AND WOOD PRODUCTS
SIC = 24
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5300	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	530	10.00	N/A
FINANCIAL MANAGERS	10	0.19	46.15
INDUSTRIAL PRODUCTION MANAGERS	100	1.89	34.00
GENERAL MANAGERS AND TOP EXECUTIVES	360	6.79	12.40
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.94	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	250	4.72	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.57	46.67
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.75	41.86
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	0.57	N/A
ALL OTHER ENGINEERS	20	0.38	N/A
DRAFTERS	70	1.32	33.33
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	50	0.94	N/A
SALES AND RELATED OCCUPATIONS	230	4.34	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.38	47.06
SALES REPS,SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.38	41.18
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	150	2.83	31.13
ALL OTHER SALES AND RELATED WORKERS	40	0.75	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	560	10.57	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.19	14.29
ADJUSTMENT CLERKS	10	0.19	36.36
SECRETARIES	90	1.70	29.67
TYPISTS	10	0.19	40.00
PROCUREMENT CLERKS	10	0.19	33.33
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	130	2.45	24.62
GENERAL OFFICE CLERKS	150	2.83	27.81
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.19	20.00
ALL OTHER OFFICE MACHINE OPERATORS	10	0.19	N/A
SWITCHBOARD OPERATORS	10	0.19	37.50
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	100	1.89	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.75	N/A
SERVICE OCCUPATIONS	50	0.94	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LUMBER AND WOOD PRODUCTS
SIC = 24
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	40	0.75	36.36
ALL OTHER SERVICE WORKERS	*	N/A	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	100	1.89	N/A
LOG HANDLING EQUIPMENT OPERATORS	10	0.19	41.67
ALL OTHER TIMBER CUTTING & RELATED LOGGING WORKERS	40	0.75	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	40	0.75	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3590	67.74	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	210	3.96	22.54
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.19	N/A
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	20	0.38	N/A
MACHINERY MAINTENANCE MECHANICS	20	0.38	47.83
MACHINERY MAINTENANCE WORKERS	10	0.19	40.00
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.57	41.18
INSTALLERS, REPAIRERS - MANUFACTURED BLDGS	10	0.19	46.15
CARPENTERS	240	4.53	39.41
TOOL AND DIE MAKERS	30	0.57	28.00
WOOD MACHINISTS	250	4.72	35.86
CABINETMAKERS AND BENCH CARPENTERS	550	10.38	15.75
ALL OTHER PRECISION METAL WORKERS	30	0.57	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	10	0.19	N/A
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	10	0.19	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	0.38	N/A
SAWING MACHINE SETTERS	40	0.75	30.56
WOODWORKING MACHINE OPERATORS AND TENDERS	420	7.92	43.13
COATING, PAINTING, SPRAYING MCH OPERATORS,TENDER	60	1.13	27.87
CEMENTING AND GLUING MACHINE OPERATORS AND TENDER	30	0.57	32.14
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	90	1.70	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	220	4.15	N/A
HAND CUTTERS AND TRIMMERS	10	0.19	N/A
HAND PAINTING AND RELATED WORKERS	20	0.38	21.05
GRINDING AND POLISHING WORKERS, HAND	70	1.32	29.41
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	560	10.57	21.25
ALL OTHER HAND WORKERS	20	0.38	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	150	2.83	31.72
TRUCK DRIVERS, LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.19	45.45
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	40	0.75	41.86

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LUMBER AND WOOD PRODUCTS
SIC = 24
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FEEDERS AND OFFBEARERS	50	0.94	48.89
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	210	3.96	46.34
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	150	2.83	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.19	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MILLWORK, PLYWOOD AND STRUCTURAL MEMBERS
SIC = 243
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2490	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	220	8.84	N/A
FINANCIAL MANAGERS	10	0.40	23.57
INDUSTRIAL PRODUCTION MANAGERS	40	1.61	20.03
GENERAL MANAGERS AND TOP EXECUTIVES	180	7.23	9.24
ALL OTHER MANAGERS AND ADMINISTRATORS	*	N/A	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	70	2.81	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.40	20.32
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.80	25.64
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.40	N/A
DRAFTERS	20	0.80	30.49
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	N/A	N/A
SALES AND RELATED OCCUPATIONS	120	4.82	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.40	44.09
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.40	37.79
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	70	2.81	17.53
ALL OTHER SALES AND RELATED WORKERS	30	1.20	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	250	10.04	N/A
SECRETARIES	60	2.41	22.48
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	60	2.41	20.25
GENERAL OFFICE CLERKS	60	2.41	20.81
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	60	2.41	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.80	N/A
SERVICE OCCUPATIONS	10	0.40	N/A
JANITORS & CLEANERS,EXC. MAIDS & HOUSE CLEANERS	10	0.40	37.41
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	10	0.40	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	10	0.40	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1810	72.69	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MILLWORK, PLYWOOD AND STRUCTURAL MEMBERS
SIC = 243
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	90	3.61	15.24
MACHINERY MAINTENANCE MECHANICS	10	0.40	28.28
MACHINERY MAINTENANCE WORKERS	10	0.40	34.64
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.40	22.22
INSTALLERS, REPAIRERS - MANUFACTURED BLDGS	10	0.40	48.03
CARPENTERS	170	6.83	26.11
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.40	N/A
WOOD MACHINISTS	130	5.22	20.69
CABINETMAKERS AND BENCH CARPENTERS	480	19.28	13.80
ALL OTHER PRECISION METAL WORKERS	40	1.61	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	0.80	N/A
WOODWORKING MACHINE OPERATORS AND TENDERS	230	9.24	36.86
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	40	1.61	33.26
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	10	0.40	46.77
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	40	1.61	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	40	1.61	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	270	10.84	22.88
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	60	2.41	24.26
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.40	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.40	31.42
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	70	2.81	34.42
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	60	2.41	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	0.80	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS WOOD PRODUCTS
SIC = 249
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1250	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	160	12.80	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.80	47.38
INDUSTRIAL PRODUCTION MANAGERS	30	2.40	26.24
GENERAL MANAGERS AND TOP EXECUTIVES	80	6.40	10.20
ALL OTHER MANAGERS AND ADMINISTRATORS	30	2.40	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	90	7.20	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.80	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	1.60	44.22
COST ESTIMATORS	10	0.80	22.26
ALL OTHER ENGINEERS	10	0.80	N/A
DRAFTERS	10	0.80	15.71
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.80	44.09
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	2.40	N/A
SALES AND RELATED OCCUPATIONS	30	2.40	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.80	29.39
ALL OTHER SALES AND RELATED WORKERS	20	1.60	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	180	14.40	N/A
ADJUSTMENT CLERKS	10	0.80	36.36
SECRETARIES	10	0.80	36.08
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	30	2.40	14.90
GENERAL OFFICE CLERKS	40	3.20	15.34
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.80	49.99
TRAFFIC, SHIPPING AND RECEIVING CLERKS	10	0.80	17.49
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	1.60	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	4.00	N/A
SERVICE OCCUPATIONS	20	1.60	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	20	1.60	14.14
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS WOOD PRODUCTS
SIC = 249
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	770	61.60	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	40	3.20	16.83
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.80	19.24
CARPENTERS	10	0.80	48.98
TOOL AND DIE MAKERS	30	2.40	26.83
WOOD MACHINISTS	50	4.00	26.64
CABINETMAKERS AND BENCH CARPENTERS	70	5.60	29.38
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	10	0.80	N/A
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	10	0.80	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.80	N/A
SAWING MACHINE OPERATORS AND TENDERS	20	1.60	49.37
WOODWORKING MACHINE OPERATORS AND TENDERS	100	8.00	24.79
CUTTING AND SLICING MACHINE OPERATORS AND TENDR	10	0.80	37.26
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	20	1.60	13.22
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	20	1.60	25.00
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	40	3.20	N/A
HAND CUTTERS AND TRIMMERS	10	0.80	N/A
HAND PAINTING AND RELATED WORKERS	20	1.60	22.94
GRINDING AND POLISHING WORKERS, HAND	60	4.80	28.34
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	180	14.40	10.91
ALL OTHER HAND WORKERS	20	1.60	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	1.60	30.56
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	1.60	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.80	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	1.60	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Furniture and Fixtures

SIC 25

The industry group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.

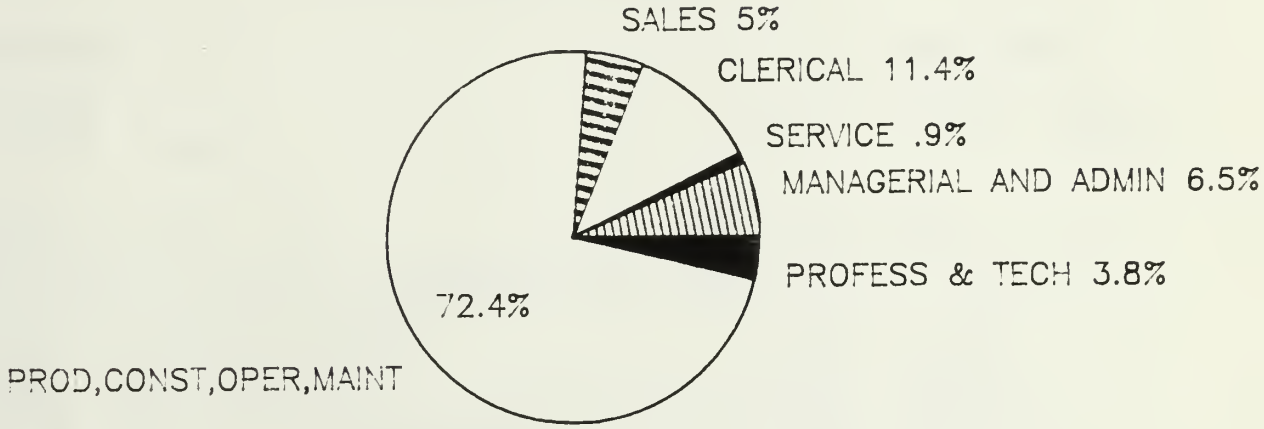
The production and maintenance occupational category accounts for 5,910 workers, or 72.4 percent of the industry employment. Next in size is the clerical category with just 930 workers, or 11 percent of the total.

Eight of the top ten ranked occupations are in the production and maintenance category with assemblers and fabricators except machine electrical, 750 workers, cabinetmakers and bench carpenters, 590 workers, woodworking machine operators and tenders, 370 workers, and wood machinists, 350 workers, the leading four occupations. The four above noted occupations with a total of 2,060 workers account for over 25 percent of the total industry employment.

The two ranked occupations not in the production and maintenance category are sales representatives except retail, 310 people, and general managers and top executives, 290 people.

FURNITURE AND FIXTURES (SIC-25)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Assemblers, Fabricators, Except Machine Electrical, Electronic	750
2.	Cabinetmakers and Bench Carpenters	590
3.	Woodworking Machine Operators and Tenders	370
4.	Wood Machinists	350
5.	Upholsters	340
6.	Other Sales Representative, Except Retail	310
7.	General Managers and Top Executives	290
8.	All Other Helpers, Laborers, Material Movers	280
9.	First Line Supervisors - Production, Operating Workers	260
10.	Woodworking Machine Setters and Set- Up Operators	220

OCCUPATIONS OF EMPLOYEES
FURNITURE AND FIXTURES
SIC = 25
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	8160	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	530	6.50	N/A
FINANCIAL MANAGERS	40	0.49	14.63
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.12	7.69
PURCHASING MANAGERS	20	0.25	11.76
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	30	0.37	17.65
ADMINISTRATIVE SERVICES MANAGERS	10	0.12	44.44
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.25	23.53
INDUSTRIAL PRODUCTION MANAGERS	80	0.98	26.51
GENERAL MANAGERS AND TOP EXECUTIVES	290	3.55	15.79
ALL OTHER MANAGERS AND ADMINISTRATORS	30	0.37	11.76
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	310	3.80	N/A
ALL OTHER FINANCIAL SPECIALISTS	40	0.49	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.25	26.09
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.12	33.33
COST ESTIMATORS	20	0.25	30.00
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	0.37	7.14
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.25	6.25
MECHANICAL ENGINEERS	10	0.12	9.09
DRAFTERS	40	0.49	22.86
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.37	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.12	N/A
COMPUTER PROGRAMMERS	10	0.12	11.11
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	90	1.10	N/A
SALES AND RELATED OCCUPATIONS	410	5.02	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	40	0.49	18.60
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	310	3.80	12.46
ALL OTHER SALES AND RELATED WORKERS	60	0.74	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	930	11.40	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.61	20.75
ADJUSTMENT CLERKS	30	0.37	7.14
SECRETARIES	160	1.96	17.09
RECEPTIONISTS AND INFORMATION CLERKS	10	0.12	8.33

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FURNITURE AND FIXTURES
SIC = 25
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TYPISTS	10	0.12	15.38
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.12	14.29
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	40	0.49	17.50
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	190	2.33	23.78
PAYROLL AND TIMEKEEPING CLERKS	40	0.49	15.79
BILLING, COST AND RATE CLERKS	20	0.25	9.09
GENERAL OFFICE CLERKS	80	0.98	21.43
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.25	10.53
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.25	21.05
SWITCHBOARD OPERATORS	10	0.12	16.67
PRODUCTION, PLANNING AND EXPEDITING CLERKS	50	0.61	5.66
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.12	20.00
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.25	8.70
TRAFFIC, SHIPPING AND RECEIVING CLERKS	110	1.35	11.43
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.25	26.67
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.37	N/A
SERVICE OCCUPATIONS	80	0.98	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.12	33.33
GUARDS AND WATCH GUARDS	10	0.12	25.00
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	40	0.49	26.83
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	20	0.25	N/A
ALL OTHER SERVICE WORKERS	10	0.12	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5910	72.43	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	260	3.19	15.15
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	50	0.61	25.00
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	40	0.49	N/A
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	30	0.37	N/A
MACHINERY MAINTENANCE MECHANICS	30	0.37	7.14
MILLWRIGHTS	10	0.12	36.36
MACHINERY MAINTENANCE WORKERS	10	0.12	33.33
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	0.61	21.74
CARPENTERS	110	1.35	42.45
ELECTRICIANS	10	0.12	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.12	N/A
TOOL AND DIE MAKERS	10	0.12	20.00
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	10	0.12	44.44
SHEET METAL WORKERS	90	1.10	1.18

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FURNITURE AND FIXTURES
SIC = 25
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PRECISION METAL WORKERS	10	0.12	N/A
PATTERN AND MODEL MAKERS, WOOD	20	0.25	13.33
PATTERN MARKERS, WOOD	10	0.12	N/A
WOOD MACHINISTS	350	4.29	21.59
CABINETMAKERS AND BENCH CARPENTERS	590	7.23	21.38
FURNITURE FINISHERS	200	2.45	18.37
ALL OTHER PRECISION WOODWORKERS	110	1.35	28.70
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	10	0.12	20.00
UPHOLSTERERS	340	4.17	31.47
A O PRECISION TEXTILE, APPAREL, FURNISHNGS WORKE	10	0.12	33.33
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	90	1.10	44.19
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	140	1.72	30.15
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	20	0.25	40.91
WELDING MACHINE OPERATORS AND TENDERS	30	0.37	33.33
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	40	0.49	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	70	0.86	N/A
SAWING MACHINE OPERATORS AND TENDERS	190	2.33	28.95
WOODWORKING MACHINE SETTERS AND SET-UP OPERATORS	220	2.70	41.89
WOODWORKING MACHINE OPERATORS AND TENDERS	370	4.53	21.25
TEXTILE MACHINE OPERATORS AND TENDERS	30	0.37	35.48
SEWING MACHINE OPERATOR, NON-GARMENT	220	2.70	19.09
FURNACE, KILN, ETC OPERATORS	10	0.12	N/A
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.12	20.00
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	20	0.25	33.33
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	20	0.25	40.91
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	130	1.59	23.48
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	20	0.25	43.48
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	40	0.49	37.50
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	0.37	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	30	0.37	N/A
WELDERS AND CUTTERS	10	0.12	41.67
HAND CUTTERS AND TRIMMERS	120	1.47	47.83
HAND PAINTING AND RELATED WORKERS	80	0.98	33.75
GRINDING AND POLISHING WORKERS, HAND	40	0.49	22.22
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	750	9.19	15.78
ALL OTHER HAND WORKERS	30	0.37	6.06
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	120	1.47	19.66
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORK	40	0.49	37.21
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.12	40.00
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	50	0.61	37.25
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.25	27.78

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FURNITURE AND FIXTURES
SIC = 25
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	NUMBER 1	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FEEDERS AND OFFBEARERS	70	0.86	41.54
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	80	0.98	29.33
HAND PACKERS AND PACKAGERS	170	2.08	20.36
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	280	3.43	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.12	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HOUSEHOLD FURNITURE
SIC = 251
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4990	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	320	6.41	N/A
FINANCIAL MANAGERS	20	0.40	11.18
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.20	N/A
PURCHASING MANAGERS	10	0.20	11.78
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.20	12.37
ADMINISTRATIVE SERVICES MANAGERS	10	0.20	34.64
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.20	28.28
INDUSTRIAL PRODUCTION MANAGERS	60	1.20	30.46
GENERAL MANAGERS AND TOP EXECUTIVES	200	4.01	15.29
ALL OTHER MANAGERS AND ADMINISTRATORS	*	N/A	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	80	1.60	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.40	48.80
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.20	24.99
COST ESTIMATORS	10	0.20	24.99
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.20	N/A
DRAFTERS	10	0.20	30.15
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.20	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.40	N/A
SALES AND RELATED OCCUPATIONS	140	2.81	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.40	24.03
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.20	34.35
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	100	2.00	24.86
ALL OTHER SALES AND RELATED WORKERS	20	0.40	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	500	10.02	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.40	23.61
ADJUSTMENT CLERKS	10	0.20	15.38
SECRETARIES	60	1.20	24.37
RECEPTIONISTS AND INFORMATION CLERKS	10	0.20	9.99
TYPISTS	10	0.20	19.24
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.20	15.71
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.40	26.92
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	120	2.40	24.30

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HOUSEHOLD FURNITURE
SIC = 251
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PAYROLL AND TIMEKEEPING CLERKS	20	0.40	6.42
BILLING, COST AND RATE CLERKS	10	0.20	20.20
GENERAL OFFICE CLERKS	60	1.20	14.84
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.20	15.74
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.20	17.67
SWITCHBOARD OPERATORS	10	0.20	16.66
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.40	11.11
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.20	19.99
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.20	15.97
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	1.40	9.29
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.20	N/A
SERVICE OCCUPATIONS	60	1.20	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.20	36.85
GUARDS AND WATCH GUARDS	10	0.20	24.99
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	20	0.40	15.00
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.20	N/A
ALL OTHER SERVICE WORKERS	10	0.20	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3910	78.36	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	170	3.41	13.30
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	40	0.80	21.95
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.20	N/A
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	20	0.40	N/A
MACHINERY MAINTENANCE MECHANICS	10	0.20	14.28
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.60	24.07
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.20	N/A
CARPENTERS	40	0.80	49.44
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.20	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.20	N/A
PATTERN AND MODEL MAKERS, WOOD	10	0.20	14.43
PATTERN MARKERS, WOOD	10	0.20	N/A
WOOD MACHINISTS	290	5.81	16.60
CABINETMAKERS AND BENCH CARPENTERS	300	6.01	20.18
FURNITURE FINISHERS	180	3.61	18.31
ALL OTHER PRECISION WOODWORKERS	80	1.60	24.57
UPHOLSTERERS	330	6.61	31.87
A O PRECISION TEXTILE,APPAREL,FURNISHNGS WORKERS	10	0.20	N/A
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	10	0.20	48.43

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HOUSEHOLD FURNITURE
SIC = 251
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	20	0.40	44.63
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	10	0.20	N/A
SAWING MACHINE SETTERS	20	0.40	29.58
SAWING MACHINE OPERATORS AND TENDERS	180	3.61	27.87
WOODWORKING MACHINE SETTERS AND SET-UP OPERATORS	150	3.01	29.94
WOODWORKING MACHINE OPERATORS AND TENDERS	280	5.61	14.01
TEXTILE MACHINE OPERATORS AND TENDERS	30	0.60	36.20
SEWING MACHINE OPERATOR, NON-GARMENT	210	4.21	19.45
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.20	19.99
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.20	48.10
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	90	1.80	19.56
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	20	0.40	44.97
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	30	0.60	46.03
ALL OTHER MACHINE OPERATORS AND TENDERS	20	0.40	N/A
HAND CUTTERS AND TRIMMERS	100	2.00	48.34
HAND PAINTING AND RELATED WORKERS	70	1.40	32.18
GRINDING AND POLISHING WORKERS, HAND	30	0.60	17.92
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	500	10.02	13.19
ALL OTHER HAND WORKERS	30	0.60	7.40
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	90	1.80	21.19
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORK	30	0.60	46.31
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.20	44.72
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.40	46.77
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.40	25.45
MACHINE FEEDERS AND OFFBEARERS	60	1.20	38.78
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	70	1.40	27.82
HAND PACKERS AND PACKAGERS	80	1.60	24.01
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	170	3.41	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Paper and Allied Products

SIC 26

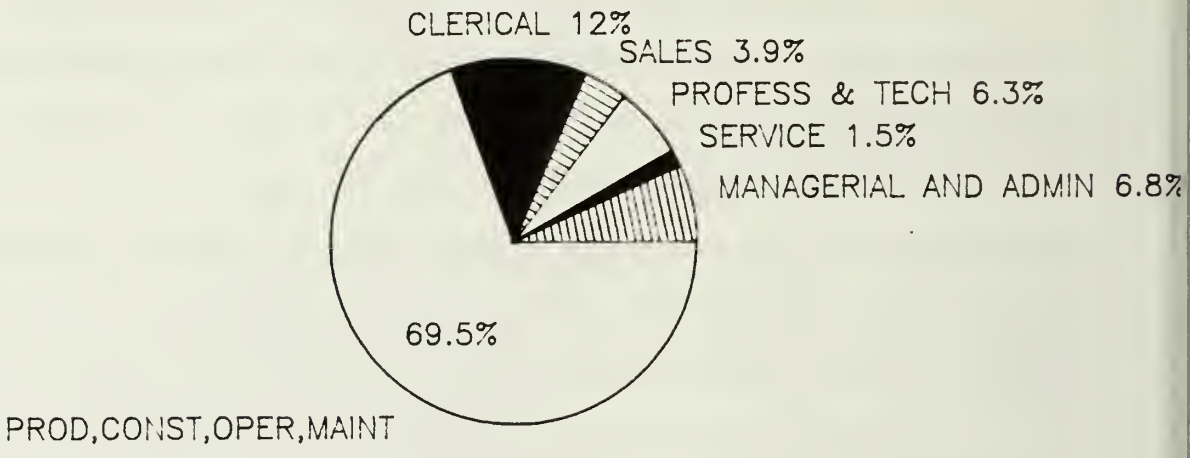
This major group includes the manufacture of pulp from wood and other cellulose fibers, and from rags; the manufacture of paper and paperboard into converted products such as coated paper, bags, boxes and envelopes.

Over the three year time frame, 1983-1986, employment in this industry has fallen by 1,200 from 26,000 to 24,800, or 4.6 percent. This was a 2 percent smaller decline than for the nondurables group as a whole which dropped from 219,700 to 205,300 workers, or 6.6 percent, over the same period.

All ten of this labor intensive industry's ten largest occupations are in the production and maintenance category. The ten ranked occupations account for 39 percent of total industry employment with paper goods machine setters, 2,240 workers, assemblers and fabricators except machine electrical, 1,010 workers, and all other machine operators and tenders, 970 workers, leading the way.

PAPER AND ALLIED PRODUCTS (SIC-26)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Paper Goods Machine Setters	2240
2.	Assemblers, Fabricators, Except Machine Electrical,Electronic	1010
3.	All Other Machine Operators and Tenders	970
4.	All Other Helpers, Laborers Material Movers	940
5.	Cutting and Slicing Machine Operators and Tenders	890
6.	Freight, Stock and Material Movers, Hand	800
7.	Hand Packers and Packagers	750
8.	First Line Supervisors - Production, Operating Workers	730
9.	Coating, Painting, Spraying Machine Operators, Tender	650
10.	Machine Feeders and Offbearers	650

OCCUPATIONS OF EMPLOYEES
PAPER AND ALLIED PRODUCTS
SIC = 26
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	24760	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1690	6.83	N/A
FINANCIAL MANAGERS	240	0.97	17.99
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	110	0.44	20.95
PURCHASING MANAGERS	100	0.40	21.00
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	210	0.85	20.28
ADMINISTRATIVE SERVICES MANAGERS	10	0.04	41.67
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	110	0.44	29.91
INDUSTRIAL PRODUCTION MANAGERS	260	1.05	14.90
GENERAL MANAGERS AND TOP EXECUTIVES	470	1.90	10.21
ALL OTHER MANAGERS AND ADMINISTRATORS	190	0.77	25.81
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1570	6.34	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	130	0.53	25.98
ALL OTHER FINANCIAL SPECIALISTS	30	0.12	29.63
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	80	0.32	16.88
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	40	0.16	14.29
COST ESTIMATORS	80	0.32	25.00
ALL OTHER MANAGEMENT SUPPORT WORKERS	110	0.44	23.81
CHEMICAL ENGINEERS	30	0.12	24.14
ELECTRICAL AND ELECTRONIC ENGINEERS	50	0.20	31.25
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	50	0.20	26.92
MECHANICAL ENGINEERS	90	0.36	31.03
ALL OTHER ENGINEERS	70	0.28	36.49
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	60	0.24	49.12
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.04	20.00
DRAFTERS	50	0.20	26.00
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	370	1.49	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	50	0.20	14.89
ALL OTHER PHYSICAL SCIENTISTS	10	0.04	33.33
LIFE SCIENTISTS	10	0.04	41.67
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	50	0.20	14.89
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	60	0.24	29.82
COMPUTER PROGRAMMERS	80	0.32	27.38
COMPUTER PROGRAMMER AIDES	20	0.08	33.33
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.04	11.11
DESIGNERS, EXCEPT INTERIOR DESIGNERS	30	0.12	26.47
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	0.12	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPER AND ALLIED PRODUCTS
SIC = 26
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES AND RELATED OCCUPATIONS	960	3.88	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	150	0.61	20.67
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	80	0.32	26.32
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	540	2.18	18.28
ALL OTHER SALES AND RELATED WORKERS	200	0.81	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2970	12.00	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	250	1.01	17.39
ADJUSTMENT CLERKS	140	0.57	24.82
SECRETARIES	460	1.86	16.92
RECEPTIONISTS AND INFORMATION CLERKS	40	0.16	29.73
TYPISTS	30	0.12	22.58
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.08	22.73
FILE CLERKS	50	0.20	33.33
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	140	0.57	26.95
PROCUREMENT CLERKS	40	0.16	26.19
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	260	1.05	23.74
PAYROLL AND TIMEKEEPING CLERKS	90	0.36	12.94
BILLING, COST AND RATE CLERKS	80	0.32	18.18
GENERAL OFFICE CLERKS	230	0.93	31.20
BILLING, POSTING, CALCULATING MACH. OPERATORS	40	0.16	31.58
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.16	28.57
DATA ENTRY KEYERS, EXCEPT COMPOSING	80	0.32	18.42
SWITCHBOARD OPERATORS	60	0.24	12.90
PRODUCTION, PLANNING AND EXPEDITING CLERKS	200	0.81	17.68
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	20	0.08	20.00
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	190	0.77	27.96
TRAFFIC, SHIPPING AND RECEIVING CLERKS	430	1.74	13.79
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	30	0.12	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	70	0.28	N/A
SERVICE OCCUPATIONS	360	1.45	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	120	0.48	36.59
GUARDS AND WATCH GUARDS	50	0.20	25.53
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	180	0.73	14.36
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.04	40.00

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPER AND ALLIED PRODUCTS
SIC = 26
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	17220	69.55	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	80	0.32	23.38
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	730	2.95	11.64
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	40	0.16	20.93
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	60	0.24	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	80	0.32	28.57
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	160	0.65	21.60
MACHY MAINT MECHANICS, WATER, PWR GENERATION	70	0.28	37.31
ALL OTHER MACHINERY MAINTENANCE MECHANICS	210	0.85	47.57
MILLWRIGHTS	130	0.53	13.18
MACHINERY MAINTENANCE WORKERS	120	0.48	26.67
MAINTENANCE REPAIRERS, GENERAL UTILITY	310	1.25	18.15
AUTOMOTIVE MECHANICS	10	0.04	14.29
PRECISION INSTRUMENT REPAIRERS	10	0.04	10.00
ELECTRICIANS	110	0.44	16.67
PAINTERS, PAPERHANGERS, CONSTRUCTION, MAINTENANC	10	0.04	7.69
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	60	0.24	11.29
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	100	0.40	N/A
TOOL AND DIE MAKERS	60	0.24	27.27
MACHINISTS	160	0.65	42.94
ALL OTHER PRECISION METAL WORKERS	20	0.08	N/A
ALL OTHER PRECISION METAL WORKERS	40	0.16	N/A
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	30	0.12	44.44
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	100	0.40	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	320	1.29	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	360	1.45	35.47
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	20	0.08	42.86
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	220	0.89	32.13
PRINTING PRESS MACHINE OPERATORS AND TENDERS	570	2.30	33.10
BINDERY MACHINE OPERATORS	40	0.16	46.34
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	290	1.17	N/A
PAPER GOODS MACHINE SETTERS	2240	9.05	19.80
BOILER OPERATORS AND TENDERS, LOW PRESSURE	150	0.61	16.89
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	60	0.24	10.71
CHEMICAL EQUIPMENT TENDERS	70	0.28	35.71
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	220	0.89	47.95

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPER AND ALLIED PRODUCTS
SIC = 26
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	890	3.59	27.32
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	240	0.97	40.25
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDE	650	2.63	36.94
CEMENTING AND GLUING MACHINE OPERATORS AND TENDE	410	1.66	29.47
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDE	20	0.08	33.33
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	310	1.25	23.30
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	50	0.20	43.14
EXTRUDING AND OTHER MACHINE OPERATORS	190	0.77	25.41
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	550	2.22	36.05
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	260	1.05	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	970	3.92	N/A
WELDERS AND CUTTERS	10	0.04	14.29
HAND CUTTERS AND TRIMMERS	120	0.48	35.83
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	1010	4.08	39.31
ALL OTHER HAND WORKERS	140	0.57	N/A
WASTE TREAT PLANT OPERATORS	10	0.04	N/A
STATIONARY ENGINEERS	60	0.24	14.55
ALL OTHER PLANT AND SYSTEMS OPERATORS	30	0.12	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	260	1.05	18.82
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKE	150	0.61	31.82
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.04	41.67
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	360	1.45	16.20
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	40	0.16	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	100	0.40	N/A
CONSTRUCTION TRADES AND EXTRACTIVE WORKER HELPER	10	0.04	8.33
MACHINE FEEDERS AND OFFBEARERS	650	2.63	39.82
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	800	3.23	27.04
HAND PACKERS AND PACKAGERS	750	3.03	30.74
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	940	3.80	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.04	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPER MILLS, EXCEPT BUILDING PAPER
SIC = 262
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4740	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	320	6.75	N/A
FINANCIAL MANAGERS	40	0.84	9.68
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.42	N/A
PURCHASING MANAGERS	10	0.21	9.99
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	50	1.05	5.75
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.42	5.88
INDUSTRIAL PRODUCTION MANAGERS	50	1.05	4.80
GENERAL MANAGERS AND TOP EXECUTIVES	80	1.69	4.79
ALL OTHER MANAGERS AND ADMINISTRATORS	60	1.27	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	340	7.17	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.63	3.57
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.42	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.21	7.14
COST ESTIMATORS	10	0.21	15.71
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	0.84	N/A
CHEMICAL ENGINEERS	20	0.42	8.83
ELECTRICAL AND ELECTRONIC ENGINEERS	10	0.21	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.21	N/A
MECHANICAL ENGINEERS	10	0.21	N/A
ALL OTHER ENGINEERS	20	0.42	11.76
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.63	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	40	0.84	9.62
LIFE SCIENTISTS	10	0.21	27.95
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	40	0.84	5.73
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	20	0.42	14.90
COMPUTER PROGRAMMERS	10	0.21	N/A
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.21	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.21	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.21	N/A
SALES AND RELATED OCCUPATIONS	130	2.74	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	50	1.05	9.68
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.21	12.49
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	60	1.27	8.97
ALL OTHER SALES AND RELATED WORKERS	10	0.21	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPER MILLS, EXCEPT BUILDING PAPER
SIC = 262
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	510	10.76	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	80	1.69	10.80
ADJUSTMENT CLERKS	20	0.42	7.85
SECRETARIES	60	1.27	6.55
STENOGRAPHERS	10	0.21	N/A
TYPISTS	10	0.21	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.21	N/A
PROCUREMENT CLERKS	10	0.21	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	30	0.63	4.87
PAYROLL AND TIMEKEEPING CLERKS	20	0.42	N/A
BILLING, COST AND RATE CLERKS	20	0.42	4.54
GENERAL OFFICE CLERKS	40	0.84	7.64
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.21	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.42	5.89
SWITCHBOARD OPERATORS	20	0.42	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.42	4.99
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.21	12.85
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	50	1.05	10.20
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	1.48	5.17
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.63	N/A
SERVICE OCCUPATIONS	90	1.90	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.21	N/A
GUARDS AND WATCH GUARDS	30	0.63	6.66
JANITORS & CLEANERS, EXCEPT MAIDS & HOUSE CLEANE	50	1.05	4.99
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3370	71.10	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	30	0.63	3.84
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	190	4.01	4.08
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.21	N/A
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.21	16.66
PRECISION INSPECTORS, TESTERS AND GRADERS	40	0.84	7.64
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	70	1.48	5.30
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	20	0.42	15.79
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.21	20.20
MILLWRIGHTS	80	1.69	5.80

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPER MILLS, EXCEPT BUILDING PAPER
SIC = 262
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINERY MAINTENANCE WORKERS	30	0.63	3.12
MAINTENANCE REPAIRERS, GENERAL UTILITY	140	2.95	6.01
AUTOMOTIVE MECHANICS	10	0.21	N/A
PRECISION INSTRUMENT REPAIRERS	10	0.21	N/A
ELECTRICIANS	50	1.05	3.53
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.21	N/A
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	50	1.05	4.99
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.21	N/A
MACHINISTS	10	0.21	N/A
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	40	0.84	14.28
PRINTING PRESS MACHINE OPERATORS AND TENDERS	10	0.21	37.26
PAPER GOODS MACHINE SETTERS	200	4.22	9.22
BOILER OPERATORS AND TENDERS, LOW PRESSURE	100	2.11	4.77
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	50	1.05	6.90
CHEMICAL EQUIPMENT TENDERS	50	1.05	7.54
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	40	0.84	15.24
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	110	2.32	7.74
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	50	1.05	8.24
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDR	110	2.32	12.93
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	40	0.84	12.19
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	10	0.21	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	200	4.22	5.14
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	20	0.42	14.37
EXTRUDING AND OTHER MACHINE OPERATORS	90	1.90	13.08
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	40	0.84	15.03
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	1.05	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	480	10.13	N/A
WELDERS AND CUTTERS	10	0.21	N/A
HAND CUTTERS AND TRIMMERS	10	0.21	12.49
ALL OTHER HAND WORKERS	40	0.84	N/A
WASTE TREAT PLANT OPERATORS	10	0.21	N/A
STATIONARY ENGINEERS	50	1.05	9.68
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	0.42	7.87
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKR	20	0.42	5.55
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	120	2.53	6.85
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	40	0.84	N/A
MECHANIC AND REPAIRER HELPERS	10	0.21	19.99
CONSTRUCTION TRADES AND EXTRACTIVE WORKER HELPER	10	0.21	11.78
MACHINE FEEDERS AND OFFBEARERS	60	1.27	9.76
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	130	2.74	5.61
HAND PACKERS AND PACKAGERS	180	3.80	9.65
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	240	5.06	7.83
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.21	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CONVERTED PAPER PRODUCTS
SIC = 264
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	12350	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	940	7.61	N/A
FINANCIAL MANAGERS	130	1.05	21.57
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	60	0.49	17.03
PURCHASING MANAGERS	70	0.57	24.37
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	140	1.13	24.57
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	90	0.73	34.12
INDUSTRIAL PRODUCTION MANAGERS	110	0.89	13.60
GENERAL MANAGERS AND TOP EXECUTIVES	220	1.78	8.95
ALL OTHER MANAGERS AND ADMINISTRATORS	130	1.05	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1050	8.50	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	70	0.57	29.26
ALL OTHER FINANCIAL SPECIALISTS	20	0.16	26.83
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.32	21.10
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.16	16.63
COST ESTIMATORS	40	0.32	33.86
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	0.49	35.31
CHEMICAL ENGINEERS	10	0.08	46.79
ELECTRICAL AND ELECTRONIC ENGINEERS	40	0.32	41.20
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.24	35.92
MECHANICAL ENGINEERS	70	0.57	37.44
ALL OTHER ENGINEERS	50	0.40	47.23
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	60	0.49	49.82
DRAFTERS	40	0.32	22.61
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	350	2.83	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.08	36.36
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.08	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	40	0.32	36.36
COMPUTER PROGRAMMERS	70	0.57	28.96
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.08	37.79
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	40	0.32	N/A
SALES AND RELATED OCCUPATIONS	440	3.56	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	70	0.57	29.60
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	250	2.02	22.10
ALL OTHER SALES AND RELATED WORKERS	120	0.97	22.40

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CONVERTED PAPER PRODUCTS
SIC = 264
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1690	13.68	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	100	0.81	20.27
ADJUSTMENT CLERKS	80	0.65	29.50
SECRETARIES	320	2.59	16.88
RECEPTIONISTS AND INFORMATION CLERKS	30	0.24	32.74
TYPISTS	20	0.16	30.86
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.16	28.28
FILE CLERKS	40	0.32	33.81
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	90	0.73	31.89
PROCUREMENT CLERKS	30	0.24	32.25
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	130	1.05	28.93
PAYROLL AND TIMEKEEPING CLERKS	50	0.40	15.63
BILLING, COST AND RATE CLERKS	30	0.24	31.33
GENERAL OFFICE CLERKS	110	0.89	30.68
BILLING, POSTING, CALCULATING MACH. OPERATORS	20	0.16	37.11
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	30	0.24	32.65
DATA ENTRY KEYERS, EXCEPT COMPOSING	50	0.40	25.25
SWITCHBOARD OPERATORS	30	0.24	18.89
PRODUCTION, PLANNING AND EXPEDITING CLERKS	110	0.89	19.66
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	110	0.89	27.75
TRAFFIC, SHIPPING AND RECEIVING CLERKS	240	1.94	13.87
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	30	0.24	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.32	N/A
SERVICE OCCUPATIONS	190	1.54	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	80	0.65	35.83
GUARDS AND WATCH GUARDS	10	0.08	45.45
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	90	0.73	20.07
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	8030	65.02	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	40	0.32	36.15
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	290	2.35	17.20
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.16	33.99
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.08	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	20	0.16	31.94
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	70	0.57	35.97

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CONVERTED PAPER PRODUCTS
SIC = 264
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	40	0.32	45.89
ALL OTHER MACHINERY MAINTENANCE MECHANICS	150	1.21	N/A
MILLWRIGHTS	50	0.40	26.76
MACHINERY MAINTENANCE WORKERS	60	0.49	31.72
MAINTENANCE REPAIRERS, GENERAL UTILITY	80	0.65	34.55
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.08	N/A
CARPENTERS	20	0.16	33.27
ELECTRICIANS	50	0.40	23.05
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.08	40.70
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.16	N/A
TOOL AND DIE MAKERS	20	0.16	48.53
MACHINISTS	100	0.81	28.20
ALL OTHER PRECISION METAL WORKERS	20	0.16	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.16	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	300	2.43	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	220	1.78	35.51
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	10	0.08	37.79
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	90	0.73	39.32
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	20	0.16	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	310	2.51	40.28
BINDERY MACHINE OPERATORS	40	0.32	46.40
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	210	1.70	N/A
PAPER GOODS MACHINE SETTERS	1160	9.39	22.50
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	570	4.62	30.05
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	190	1.54	48.22
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDE	410	3.32	38.66
CEMENTING AND GLUING MACHINE OPERATORS AND TENDE	150	1.21	36.75
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	50	0.40	49.81
EXTRUDING AND OTHER MACHINE OPERATORS	70	0.57	46.34
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	360	2.91	41.29
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	140	1.13	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	450	3.64	N/A
ALL OTHER HAND WORKERS	420	3.40	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	50	0.40	42.71
ALL OTHER MOTOR VEHICLE OPERATORS	30	0.24	N/A
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.08	45.45
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	140	1.13	21.98
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	20	0.16	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	30	0.24	N/A
MECHANIC AND REPAIRER HELPERS	20	0.16	49.47
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	430	3.48	28.07

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CONVERTED PAPER PRODUCTS
SIC = 264
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HAND PACKERS AND PACKAGERS	410	3.32	37.71
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	650	5.26	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPERBOARD CONTAINERS AND BOXES
SIC = 265
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	6740	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	360	5.34	N/A
FINANCIAL MANAGERS	50	0.74	14.85
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.45	40.68
PURCHASING MANAGERS	20	0.30	18.16
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.30	22.72
ADMINISTRATIVE SERVICES MANAGERS	10	0.15	34.64
INDUSTRIAL PRODUCTION MANAGERS	80	1.19	18.09
GENERAL MANAGERS AND TOP EXECUTIVES	130	1.93	11.41
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.15	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	160	2.37	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.30	27.27
ALL OTHER FINANCIAL SPECIALISTS	10	0.15	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.30	24.28
COST ESTIMATORS	30	0.45	19.00
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.15	40.40
ALL OTHER ENGINEERS	10	0.15	N/A
DRAFTERS	10	0.15	47.95
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.15	44.72
COMPUTER PROGRAMMERS	10	0.15	44.72
COMPUTER PROGRAMMER AIDES	10	0.15	34.99
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.30	29.73
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.15	N/A
SALES AND RELATED OCCUPATIONS	350	5.19	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.45	17.66
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	70	1.04	28.43
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	190	2.82	12.89
ALL OTHER SALES AND RELATED WORKERS	60	0.89	23.00
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	650	9.64	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.74	18.76
ADJUSTMENT CLERKS	40	0.59	22.30
SECRETARIES	70	1.04	13.07
RECEPTIONISTS AND INFORMATION CLERKS	10	0.15	33.07

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPERBOARD CONTAINERS AND BOXES
SIC = 265
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	40	0.59	25.07
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	90	1.34	14.71
PAYROLL AND TIMEKEEPING CLERKS	20	0.30	21.20
BILLING, COST AND RATE CLERKS	30	0.45	15.85
GENERAL OFFICE CLERKS	40	0.59	26.77
BILLING, POSTING, CALCULATING MACH. OPERATORS	20	0.30	28.28
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.15	48.98
SWITCHBOARD OPERATORS	20	0.30	15.78
PRODUCTION, PLANNING AND EXPEDITING CLERKS	70	1.04	17.60
TRAFFIC, SHIPPING AND RECEIVING CLERKS	110	1.63	12.37
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	0.59	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.45	N/A
SERVICE OCCUPATIONS	80	1.19	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	30	0.45	48.49
GUARDS AND WATCH GUARDS	10	0.15	47.95
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	30	0.45	13.62
ALL OTHER SERVICE WORKERS	*	N/A	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5140	76.26	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.15	28.57
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	220	3.26	10.01
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.30	24.25
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.30	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	20	0.30	25.30
ALL OTHER INSPECTORS, TESTERS, RELATED OCC.	20	0.30	N/A
ALL OTHER MACHINERY MAINTENANCE MECHANICS	50	0.74	N/A
MACHINERY MAINTENANCE WORKERS	20	0.30	38.39
MAINTENANCE REPAIRERS, GENERAL UTILITY	90	1.34	22.36
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.15	N/A
ELECTRICIANS	10	0.15	45.82
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	60	0.89	N/A
TOOL AND DIE MAKERS	40	0.59	20.46
ALL OTHER PRECISION METAL WORKERS	60	0.89	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.30	46.31

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAPERBOARD CONTAINERS AND BOXES
SIC = 265
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	30	0.45	49.79
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	100	1.48	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	30	0.45	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	120	1.78	21.43
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	10	0.15	42.25
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	100	1.48	31.81
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	30	0.45	46.79
PRINTING PRESS MACHINE OPERATORS AND TENDERS	240	3.56	19.74
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	80	1.19	N/A
PAPER GOODS MACHINE SETTERS	740	10.98	16.68
BOILER OPERATORS AND TENDERS, LOW PRESSURE	20	0.30	28.84
CUTTING, SLICING MACHINE SETTERS, SET-UP OPER.	100	1.48	47.72
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	180	2.67	21.31
CEMENTING AND GLUING MACHINE OPERATORS AND TENDE	220	3.26	27.49
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	150	2.23	29.67
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	120	1.78	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	290	4.30	N/A
HAND CUTTERS AND TRIMMERS	90	1.34	28.83
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	590	8.75	27.94
ALL OTHER HAND WORKERS	50	0.74	46.55
STATIONARY ENGINEERS	10	0.15	39.99
ALL OTHER PLANT AND SYSTEMS OPERATORS	30	0.45	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	180	2.67	14.17
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKE	50	0.74	23.53
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	90	1.34	20.08
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.15	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.30	N/A
MACHINE FEEDERS AND OFFBEARERS	320	4.75	14.42
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	170	2.52	24.42
HAND PACKERS AND PACKAGERS	130	1.93	28.97
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	200	2.97	N/A

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N/A - NOT AVAILABLE

Printing, Publishing, and Allied Industries

SIC 27

This major group encompasses establishments engaged in printing, bookbinding, typesetting, and engraving; and the publishing of books, periodicals and newspapers. Printing and publishing is the largest employer in the nondurable goods sector This industry shows a gain in employment since the 1983 survey of 6,100 jobs or 12.7 percent in contrast to the drop of 14,400 jobs or 6.5 percent in the nondurable goods sector.

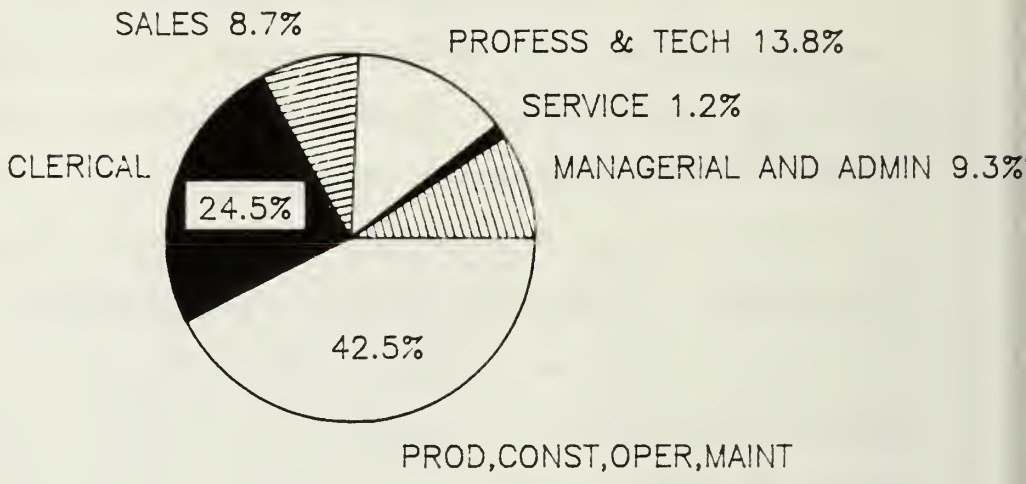
Production and maintenance occupations account for 42.5 percent of printing employment and 38.5 percent of the employment represented by the ten leading occupational titles is in production and maintenance jobs.

The professional and technical occupations in SIC 271 (newspapers) and SIC 272 (periodicals) are largely represented by writers, editors, reporters and correspondents. They comprise 74 percent of professional and technical employment in newspapers and 56 percent in periodicals.

The commercial printing (SIC 275) industry employs 42 percent (9,510 people) of the production and maintenance workers employed in the publishing industries. The concentration of printing press machine operators (1,210 workers), offset lithographic press setters and set-up operators (1,160) workers) and precision lithography photoengraving operators (1,040 workers) are the major occupations contributing to the high level of employment in this category.

PRINTING AND PUBLISHING (SIC-27)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	General Managers and Top Executives	2560
2.	Writers and Editors	2170
3.	Typesetting Composing Machine Operators	1870
4.	Printing Press Machine Operators and Tenders	1860
5.	Reporters and Correspondents	1570
6.	Other Sales Representatives, Except Retail	1520
7.	Offset Lithographic Press Setters, Set - Up Operators	1420
8.	Hand Packers and Packagers	1340
9.	Bookkeeping, Accounting and Auditing Clerks	1290
10.	General Office Clerks	1260

OCCUPATIONS OF EMPLOYEES
PRINTING AND PUBLISHING
SIC = 27
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	52680	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	4890	9.28	N/A
FINANCIAL MANAGERS	300	0.57	18.86
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	110	0.21	14.81
PURCHASING MANAGERS	80	0.15	21.25
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	660	1.25	26.83
ADMINISTRATIVE SERVICES MANAGERS	80	0.15	40.48
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	100	0.19	12.00
INDUSTRIAL PRODUCTION MANAGERS	550	1.04	24.28
GENERAL MANAGERS AND TOP EXECUTIVES	2560	4.86	15.12
ALL OTHER MANAGERS AND ADMINISTRATORS	460	0.87	22.81
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	7260	13.78	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	160	0.30	21.95
ALL OTHER FINANCIAL SPECIALISTS	80	0.15	27.38
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	90	0.17	25.27
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	120	0.23	13.56
COST ESTIMATORS	190	0.36	23.66
ALL OTHER MANAGEMENT SUPPORT WORKERS	190	0.36	38.66
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.06	27.27
MECHANICAL ENGINEERS	20	0.04	25.00
ALL OTHER ENGINEERS	10	0.02	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.02	10.00
DRAFTERS	10	0.02	36.36
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.02	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	250	0.47	26.29
COMPUTER PROGRAMMERS	310	0.59	31.21
COMPUTER PROGRAMMER AIDES	140	0.27	16.91
LIBRARIANS, PROFESSIONAL	80	0.15	17.11
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	20	0.04	6.67
WRITERS AND EDITORS	2170	4.12	12.45
TECHNICAL WRITERS	40	0.08	47.73
PUBLIC REL. SPECIALISTS & PUBLICITY WRITERS	50	0.09	23.08
REPORTERS AND CORRESPONDENTS	1570	2.98	12.36
PHOTOGRAPHERS	390	0.74	33.42
ARTISTS AND RELATED WORKERS	580	1.10	34.32
DESIGNERS, EXCEPT INTERIOR DESIGNERS	440	0.84	35.93
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	320	0.61	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRINTING AND PUBLISHING
SIC = 27
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES AND RELATED OCCUPATIONS	4570	8.68	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	780	1.48	18.49
SALES AGENTS, ADVERTISING	1230	2.33	28.29
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	440	0.84	49.09
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	1520	2.89	23.01
CASHIERS	30	0.06	7.69
NEWS-ST VENDORS, PHONE SOLICITORS, DOOR-TO-DOOR	350	0.66	48.99
ALL OTHER SALES AND RELATED WORKERS	230	0.44	23.79
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	12920	24.53	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	840	1.59	22.58
ADJUSTMENT CLERKS	770	1.46	22.63
LIBRARY ASSISTANTS AND BOOKMOBILE DRIVERS	50	0.09	21.74
ADVERTISING CLERKS	620	1.18	23.18
PROOFREADERS AND COPY MARKERS	750	1.42	36.40
SECRETARIES	1140	2.16	20.61
RECEPTIONISTS AND INFORMATION CLERKS	280	0.53	35.87
TYPISTS	770	1.46	46.01
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	60	0.11	18.03
FILE CLERKS	90	0.17	20.45
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	560	1.06	28.70
PROCUREMENT CLERKS	70	0.13	33.82
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	1290	2.45	16.10
PAYROLL AND TIMEKEEPING CLERKS	110	0.21	26.17
BILLING, COST AND RATE CLERKS	110	0.21	38.10
GENERAL OFFICE CLERKS	1260	2.39	20.78
BILLING, POSTING, CALCULATING MACH. OPERATORS	60	0.11	27.87
DUPLICATING MACHINE OPERATORS	20	0.04	47.37
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	180	0.34	24.72
DATA ENTRY KEYERS, EXCEPT COMPOSING	370	0.70	20.71
ALL OTHER OFFICE MACHINE OPERATORS	1030	1.96	N/A
SWITCHBOARD OPERATORS	200	0.38	18.78
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	220	0.42	48.42
MESSENGERS	150	0.28	43.15
DISPATCHERS - EXCEPT POLICE, FIRE AND AMBULANCE	40	0.08	10.00
PRODUCTION, PLANNING AND EXPEDITING CLERKS	620	1.18	36.88
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	380	0.72	36.15
TRAFFIC, SHIPPING AND RECEIVING CLERKS	460	0.87	26.48

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRINTING AND PUBLISHING
SIC = 27
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	160	0.30	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	310	0.59	N/A
SERVICE OCCUPATIONS	620	1.18	N/A
ALL OTHER SERVICE SUPERVISORS	50	0.09	N/A
GUARDS AND WATCH GUARDS	60	0.11	12.50
JANITORS & CLEANERS, EX.MAIDS & HOUSE CLEANERS	470	0.89	23.09
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	30	0.06	32.14
ALL OTHER SERVICE WORKERS	20	0.04	35.29
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	22410	42.54	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	70	0.13	47.22
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	950	1.80	22.60
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	50	0.09	20.75
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	50	0.09	23.91
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	80	0.15	9.09
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	110	0.21	35.45
MACHINERY MAINTENANCE MECHANICS	140	0.27	23.24
MACHINERY MAINTENANCE WORKERS	40	0.08	22.22
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	440	0.84	N/A
CARPENTERS	10	0.02	14.29
ELECTRICIANS	60	0.11	8.93
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.02	N/A
MACHINISTS	90	0.17	23.40
ALL OTHER PRECISION METAL WORKERS	40	0.08	N/A
PRECISION COMPOSITORS, TYPESETTERS AND ARRANGERS	640	1.21	34.43
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	1250	2.37	18.44
ALL OTHER PRECISION PRINTING WORKERS	100	0.19	27.00
ALL OTHER PRECISION METAL WORKERS	730	1.39	N/A
OFFSET LITHOGRAPHIC PRESS SETTRS,SET-UP OPER	1420	2.70	26.86
LETTERPRESS SETTERS	600	1.14	41.51
ALL OTHER PRINTING PRESS SETTERS, SET-UP OPER	550	1.04	14.62
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	400	0.76	37.69
BINDERY MACHINE SET	780	1.48	33.89
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	240	0.46	N/A
TYPESETTING COMPOSING MACHINE OPERATORS	1870	3.55	17.08
PRINTING PRESS MACHINE OPERATORS AND TENDERS	1860	3.53	28.17
PHOTOENGRAVING, OTHER OPERATORS	70	0.13	23.19
BINDERY MACHINE OPERATORS	920	1.75	34.52

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRINTING AND PUBLISHING
SIC = 27
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	760	1.44	44.42
PHOTOGRAPHIC PROCESS MACHINE OPERATORS	130	0.25	35.38
PAPER GOODS MACHINE SETTERS	10	0.02	8.33
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	190	0.36	47.62
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	120	0.23	25.42
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	70	0.13	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	80	0.15	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	710	1.35	25.35
ALL OTHER HAND WORKERS	950	1.80	N/A
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKERS	470	0.89	21.29
DRIVER / SALES WORKERS	950	1.80	19.05
ALL OTHER MOTOR VEHICLE OPERATORS	40	0.08	N/A
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.02	41.67
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	120	0.23	29.91
CONVEYOR OPERATORS AND TENDERS	70	0.13	16.92
MECHANIC AND REPAIRER HELPERS	20	0.04	42.86
MACHINE FEEDERS AND OFFBEARERS	980	1.86	30.86
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	280	0.53	44.09
HAND PACKERS AND PACKAGERS	1340	2.54	23.64
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	630	1.20	26.32
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	0.04	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
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SIC = 271
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	15390	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1100	7.15	N/A
FINANCIAL MANAGERS	60	0.39	3.38
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.13	5.89
PURCHASING MANAGERS	10	0.06	11.78
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	140	0.91	45.33
ADMINISTRATIVE SERVICES MANAGERS	10	0.06	39.08
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.13	9.42
INDUSTRIAL PRODUCTION MANAGERS	80	0.52	17.15
GENERAL MANAGERS AND TOP EXECUTIVES	710	4.61	7.72
ALL OTHER MANAGERS AND ADMINISTRATORS	40	0.26	14.19
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	3290	21.38	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.19	8.81
ALL OTHER FINANCIAL SPECIALISTS	10	0.06	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.06	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.13	11.54
COST ESTIMATORS	10	0.06	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.13	27.48
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	80	0.52	29.41
COMPUTER PROGRAMMERS	40	0.26	13.32
COMPUTER PROGRAMMER AIDES	20	0.13	23.09
LIBRARIANS, PROFESSIONAL	60	0.39	9.27
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.06	N/A
WRITERS AND EDITORS	1120	7.28	4.62
TECHNICAL WRITERS	20	0.13	39.44
PUBLIC REL. SPECIALISTS & PUBLICITY WRITERS	10	0.06	16.66
REPORTERS AND CORRESPONDENTS	1310	8.51	7.32
PHOTOGRAPHERS	230	1.49	17.00
ARTISTS AND RELATED WORKERS	160	1.04	31.31
DESIGNERS, EXCEPT INTERIOR DESIGNERS	140	0.91	26.37
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	40	0.26	N/A
SALES AND RELATED OCCUPATIONS	1560	10.14	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	300	1.95	7.06
SALES AGENTS, ADVERTISING	630	4.09	16.35
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	180	1.17	15.41

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CASHIERS	30	0.19	7.69
NEWS-ST VENDORS, PHONE SOLICITORS, DOOR-TO-DOOR	180	1.17	17.17
ALL OTHER SALES AND RELATED WORKERS	230	1.49	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	3150	20.47	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	230	1.49	20.33
ADJUSTMENT CLERKS	290	1.88	10.87
LIBRARY ASSISTANTS AND BOOKMOBILE DRIVERS	40	0.26	17.07
ADVERTISING CLERKS	540	3.51	16.32
PROOFREADERS AND COPY MARKERS	120	0.78	25.33
SECRETARIES	260	1.69	25.69
RECEPTIONISTS AND INFORMATION CLERKS	50	0.32	19.87
TYPISTS	210	1.36	29.69
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.13	37.14
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.06	N/A
FILE CLERKS	10	0.06	22.36
PROCUREMENT CLERKS	10	0.06	38.18
STATISTICAL CLERKS	10	0.06	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	200	1.30	8.13
PAYROLL AND TIMEKEEPING CLERKS	20	0.13	7.87
BILLING, COST AND RATE CLERKS	30	0.19	18.51
GENERAL OFFICE CLERKS	450	2.92	13.75
BILLING, POSTING, CALCULATING MACH. OPERATORS	40	0.26	16.66
DUPLICATING MACHINE OPERATORS	10	0.06	20.20
MAIL MACH. OPERATORS, PREPARATION AND HANDLING	60	0.39	22.19
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	90	0.58	18.38
DATA ENTRY KEYERS, EXCEPT COMPOSING	50	0.32	18.05
DATA KEYERS, COMPOSING	100	0.65	11.95
ALL OTHER OFFICE MACHINE OPERATORS	20	0.13	36.00
SWITCHBOARD OPERATORS	90	0.58	14.44
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	30	0.19	20.55
MESSENGERS	60	0.39	19.80
DISPATCHERS - EXCEPT POLICE, FIRE AND AMBULANCE	30	0.19	9.12
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.06	24.74
TRAFFIC, SHIPPING AND RECEIVING CLERKS	50	0.32	10.86
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	0.26	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.13	N/A
SERVICE OCCUPATIONS	280	1.82	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.13	14.90
GUARDS AND WATCH GUARDS	50	0.32	10.95
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	200	1.30	12.02
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.06	22.36
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	6030	39.18	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS, REPAIRERS	10	0.06	14.28
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	100	0.65	32.24
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	30	0.19	16.36
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.19	17.62
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.06	N/A
MACHINERY MAINTENANCE MECHANICS	30	0.19	13.25
MACHINERY MAINTENANCE WORKERS	10	0.06	33.33
MAINTENANCE REPAIRERS, GENERAL UTILITY	100	0.65	36.37
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.06	N/A
CARPENTERS	10	0.06	N/A
ELECTRICIANS	40	0.26	7.85
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.06	N/A
MACHINISTS	40	0.26	N/A
PRECISION COMPOSITORS, TYPESETTERS AND ARRANGERS	290	1.88	16.83
JOB PRINTERS	70	0.45	39.84
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	20	0.13	N/A
BOOKBINDERS	10	0.06	37.50
ALL OTHER PRECISION PRINTING WORKERS	90	0.58	25.73
PRECISION PHOTOGRAPHIC PROCESS WORKERS	10	0.06	27.95
ALL OTHER PRECISION METAL WORKERS	20	0.13	N/A
LETTERPRESS SETTERS	200	1.30	20.10
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPERATORS	470	3.05	N/A
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	100	0.65	18.78
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	10	0.06	36.36
A O PRINTING RELATED SETTERS,SET-UP OPERATORS	130	0.84	N/A
TYPESETTING COMPOSING MACHINE OPERATORS	860	5.59	10.36
PRINTING PRESS MACHINE OPERATORS AND TENDERS	370	2.40	34.20
PHOTOENGRAVING, OTHER OPERATORS	40	0.26	24.17
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	70	0.45	N/A
PHOTOGRAPHIC PROCESS MACHINE OPERATORS	90	0.58	33.73
PAPER GOODS MACHINE SETTERS	10	0.06	11.78
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.06	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.06	N/A

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OCCUPATIONS OF EMPLOYEES
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER HAND WORKERS	170	1.10	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	290	1.88	14.19
DRIVER / SALES WORKERS	760	4.94	8.44
ALL OTHER MOTOR VEHICLE OPERATORS	20	0.13	N/A
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.06	38.18
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.13	24.21
CONVEYOR OPERATORS AND TENDERS	60	0.39	11.86
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.06	N/A
MECHANIC AND REPAIRER HELPERS	10	0.06	21.75
MACHINE FEEDERS AND OFFBEARERS	220	1.43	31.86
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	0.19	22.58
HAND PACKERS AND PACKAGERS	910	5.91	16.35
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	250	1.62	35.07
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.06	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PERIODICALS
SIC = 272
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3840	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	530	13.80	N/A
FINANCIAL MANAGERS	30	0.78	30.45
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.52	38.87
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	150	3.91	18.55
INDUSTRIAL PRODUCTION MANAGERS	40	1.04	29.96
GENERAL MANAGERS AND TOP EXECUTIVES	200	5.21	25.44
ALL OTHER MANAGERS AND ADMINISTRATORS	80	2.08	N/A
PROFESSIONAL,PARAPROFESSIONAL,TECH OCCUPATION	1150	29.95	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.52	49.93
ALL OTHER FINANCIAL SPECIALISTS	20	0.52	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.26	40.40
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	1.56	N/A
WRITERS AND EDITORS	390	10.16	28.29
PUBLIC REL. SPECIALISTS & PUBLICITY WRITERS	10	0.26	38.72
REPORTERS AND CORRESPONDENTS	260	6.77	37.49
PHOTOGRAPHERS	50	1.30	41.82
ARTISTS AND RELATED WORKERS	40	1.04	49.37
DESIGNERS, EXCEPT INTERIOR DESIGNERS	130	3.39	40.02
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	170	4.43	N/A
SALES AND RELATED OCCUPATIONS	740	19.27	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	80	2.08	28.95
SALES AGENTS, ADVERTISING	250	6.51	30.28
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	200	5.21	44.11
ALL OTHER SALES AND RELATED WORKERS	220	5.73	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1090	28.39	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	60	1.56	42.21
ADVERTISING CLERKS	40	1.04	49.63
SECRETARIES	170	4.43	19.49
RECEPTIONISTS AND INFORMATION CLERKS	40	1.04	22.36
TYPISTS	30	0.78	48.81
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.26	48.98
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	110	2.86	20.95

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OCCUPATIONS OF EMPLOYEES
PERIODICALS
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
GENERAL OFFICE CLERKS	50	1.30	37.90
ALL OTHER OFFICE MACHINE OPERATORS	140	3.65	N/A
SWITCHBOARD OPERATORS	20	0.52	29.58
PRODUCTION, PLANNING AND EXPEDITING CLERKS	60	1.56	44.79
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.26	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	360	9.38	N/A
SERVICE OCCUPATIONS	10	0.26	N/A
ALL OTHER SERVICE WORKERS	10	0.26	N/A
PROD, CONSTR,OPERATING,MAINT & MATL HANDL OCCS	340	8.85	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	10	0.26	48.95
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	10	0.26	N/A
ALL OTHER PRECISION PRINTING WORKERS	20	0.52	N/A
ALL OTHER PRECISION METAL WORKERS	110	2.86	N/A
TYPESETTING COMPOSING MACHINE OPERATORS	50	1.30	42.87
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	50	1.30	N/A
ALL OTHER MOTOR VEHICLE OPERATORS	80	2.08	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	10	0.26	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BOOKS
SIC = 273
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	6400	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	760	11.88	N/A
FINANCIAL MANAGERS	40	0.63	8.80
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.47	9.79
PURCHASING MANAGERS	20	0.31	20.32
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	140	2.19	14.70
ADMINISTRATIVE SERVICES MANAGERS	30	0.47	33.74
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.31	13.97
INDUSTRIAL PRODUCTION MANAGERS	70	1.09	18.35
GENERAL MANAGERS AND TOP EXECUTIVES	200	3.13	13.94
ALL OTHER MANAGERS AND ADMINISTRATORS	220	3.44	12.09
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1300	20.31	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	60	0.94	14.98
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.31	21.73
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.31	6.24
COST ESTIMATORS	10	0.16	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	50	0.78	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	80	1.25	24.40
COMPUTER PROGRAMMERS	70	1.09	22.53
COMPUTER PROGRAMMER AIDES	30	0.47	25.17
LIBRARIANS, PROFESSIONAL	10	0.16	28.86
WRITERS AND EDITORS	600	9.38	14.00
TECHNICAL WRITERS	20	0.31	34.27
PUBLIC REL. SPECIALISTS & PUBLICITY WRITERS	40	0.63	19.99
ARTISTS AND RELATED WORKERS	120	1.88	29.02
DESIGNERS, EXCEPT INTERIOR DESIGNERS	40	0.63	23.00
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	150	2.34	N/A
SALES AND RELATED OCCUPATIONS	390	6.09	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	40	0.63	32.09
ALL OTHER SALES REPS & SALESPERSONS, SERVICE	30	0.47	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	230	3.59	24.59
ALL OTHER SALES AND RELATED WORKERS	90	1.41	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1930	30.16	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	120	1.88	10.96
ADJUSTMENT CLERKS	110	1.72	17.32
PROOFREADERS AND COPY MARKERS	20	0.31	17.64
SECRETARIES	340	5.31	14.48
RECEPTIONISTS AND INFORMATION CLERKS	30	0.47	15.30
TYPISTS	90	1.41	40.96
TYPISTS, WORD PROCESSING EQUIPMENT	30	0.47	46.15
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.31	12.49
FILE CLERKS	30	0.47	18.60
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	90	1.41	34.50
PROCUREMENT CLERKS	30	0.47	34.51
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	160	2.50	12.10
PAYROLL AND TIMEKEEPING CLERKS	20	0.31	18.02
BILLING, COST AND RATE CLERKS	20	0.31	35.35
GENERAL OFFICE CLERKS	170	2.66	14.69
MAIL MACH. OPERATORS, PREPARATION AND HANDLING	10	0.16	44.09
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.63	15.78
DATA ENTRY KEYERS, EXCEPT COMPOSING	80	1.25	19.15
ALL OTHER OFFICE MACHINE OPERATORS	10	0.16	N/A
SWITCHBOARD OPERATORS	20	0.31	20.72
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	30	0.47	12.47
MESSENGERS	10	0.16	24.05
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	190	2.97	29.08
TRAFFIC, SHIPPING AND RECEIVING CLERKS	80	1.25	19.48
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	160	2.50	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.63	N/A
SERVICE OCCUPATIONS	60	0.94	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.16	17.67
GUARDS AND WATCH GUARDS	10	0.16	N/A
JANITORS & CLEANERS, EXCEPT MAIDS & HOUSE CLEANERS	30	0.47	6.92
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.16	48.98
ALL OTHER SERVICE WORKERS	20	0.31	36.44
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1960	30.63	N/A
1ST LINE SUPERS - MECHANICS, INSTALLERS, REPAIRERS	10	0.16	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	60	0.94	16.83
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.16	11.11
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.16	30.61

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
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OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.31	40.82
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	10	0.16	N/A
MACHINERY MAINTENANCE MECHANICS	30	0.47	22.60
MACHINERY MAINTENANCE WORKERS	20	0.31	27.85
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.63	14.19
PRECISION COMPOSITORS, TYPESETTERS AND ARRANGERS	10	0.16	48.98
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	120	1.88	38.42
BOOKBINDERS	10	0.16	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.31	N/A
OFFSET LITHOGRAPHIC PRESS SETTRS, SET-UP OPER.	80	1.25	22.73
LETTERPRESS SETTERS	20	0.31	N/A
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	70	1.09	24.80
SPECIALTY MATERIALS PRINTING MACHINE SETTERS	30	0.47	27.59
BINDERY MACHINE SET	90	1.41	15.83
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	30	0.47	27.71
TYPESETTING COMPOSING MACHINE OPERATORS	90	1.41	31.36
PRINTING PRESS MACHINE OPERATORS AND TENDERS	100	1.56	34.72
PHOTOENGRAVING, OTHER OPERATORS	20	0.31	N/A
BINDERY MACHINE OPERATORS	210	3.28	36.17
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	220	3.44	30.89
PHOTOGRAPHIC PROCESS MACHINE OPERATORS	20	0.31	44.87
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	50	0.78	49.34
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	50	0.78	43.96
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.16	N/A
ALL OTHER HAND WORKERS	190	2.97	48.91
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.16	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.47	16.87
MACHINE FEEDERS AND OFFBEARERS	140	2.19	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	0.47	30.84
HAND PACKERS AND PACKAGERS	10	0.16	45.45
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	110	1.72	14.78
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.16	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PUBLISHING
SIC = 274
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2320	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	340	14.66	N/A
FINANCIAL MANAGERS	10	0.43	18.84
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.43	20.20
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	90	3.88	28.82
ADMINISTRATIVE SERVICES MANAGERS	10	0.43	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.86	N/A
INDUSTRIAL PRODUCTION MANAGERS	30	1.29	26.70
GENERAL MANAGERS AND TOP EXECUTIVES	110	4.74	12.30
ALL OTHER MANAGERS AND ADMINISTRATORS	60	2.59	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	380	16.38	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.43	26.35
ALL OTHER FINANCIAL SPECIALISTS	30	1.29	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	40	1.72	2.49
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	1.29	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	40	1.72	5.12
COMPUTER PROGRAMMERS	40	1.72	23.09
COMPUTER PROGRAMMER AIDES	60	2.59	1.78
WRITERS AND EDITORS	60	2.59	35.79
PHOTOGRAPHERS	10	0.43	33.16
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	70	3.02	N/A
SALES AND RELATED OCCUPATIONS	450	19.40	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	150	6.47	4.68
SALES AGENTS, ADVERTISING	150	6.47	34.49
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	140	6.03	9.54
ALL OTHER SALES AND RELATED WORKERS	10	0.43	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	670	28.88	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	60	2.59	5.81
ADJUSTMENT CLERKS	10	0.43	N/A
PROOFREADERS AND COPY MARKERS	10	0.43	45.17
SECRETARIES	50	2.16	20.75
RECEPTIONISTS AND INFORMATION CLERKS	20	0.86	46.66
TYPISTS	30	1.29	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PUBLISHING
SIC = 274
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.43	47.14
FILE CLERKS	20	0.86	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	50	2.16	24.21
GENERAL OFFICE CLERKS	180	7.76	12.73
DATA ENTRY KEYERS, EXCEPT COMPOSING	120	5.17	N/A
ALL OTHER OFFICE MACHINE OPERATORS	30	1.29	N/A
SWITCHBOARD OPERATORS	10	0.43	44.72
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	20	0.86	9.72
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.86	31.25
TRAFFIC, SHIPPING AND RECEIVING CLERKS	10	0.43	28.28
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	1.29	N/A
SERVICE OCCUPATIONS	10	0.43	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	10	0.43	N/A
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	470	20.26	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	30	1.29	22.86
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	10	0.43	N/A
MACHINERY MAINTENANCE MECHANICS	10	0.43	19.99
MACHINERY MAINTENANCE WORKERS	10	0.43	11.11
ALL OTHER PRECISION PRINTING WORKERS	30	1.29	N/A
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPER.	90	3.88	N/A
BINDERY MACHINE SET	30	1.29	43.45
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.43	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	30	1.29	29.74
BINDERY MACHINE OPERATORS	60	2.59	23.91
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	10	0.43	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	30	1.29	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.43	N/A
ALL OTHER HAND WORKERS	60	2.59	N/A
ALL OTHER MOTOR VEHICLE OPERATORS	30	1.29	N/A
MACHINE FEEDERS AND OFFBEARERS	30	1.29	16.75
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMERCIAL PRINTING
SIC = 275
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	18150	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1750	9.64	N/A
FINANCIAL MANAGERS	120	0.66	29.19
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.17	21.16
PURCHASING MANAGERS	30	0.17	29.66
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	120	0.66	32.53
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.11	23.61
INDUSTRIAL PRODUCTION MANAGERS	230	1.27	28.26
GENERAL MANAGERS AND TOP EXECUTIVES	1130	6.23	18.32
ALL OTHER MANAGERS AND ADMINISTRATORS	70	0.39	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	780	4.30	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.17	38.63
ALL OTHER FINANCIAL SPECIALISTS	20	0.11	35.90
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.22	21.42
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	40	0.22	23.91
COST ESTIMATORS	160	0.88	25.82
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	0.17	20.62
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.11	48.81
ALL OTHER ENGINEERS	10	0.06	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	30	0.17	38.16
COMPUTER PROGRAMMERS	40	0.22	34.58
ARTISTS AND RELATED WORKERS	160	0.88	36.22
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	220	1.21	N/A
SALES AND RELATED OCCUPATIONS	1070	5.90	N/A
ALL OTHER SALES REPS & SALESPERSONS, SERVICE	160	0.88	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	240	1.32	42.64
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	500	2.75	26.13
ALL OTHER SALES AND RELATED WORKERS	170	0.94	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	4830	26.61	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	290	1.60	30.39
ADJUSTMENT CLERKS	200	1.10	17.71
PROOFREADERS AND COPY MARKERS	370	2.04	44.74
SECRETARIES	220	1.21	25.71

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMERCIAL PRINTING
SIC = 275
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.11	31.97
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	370	2.04	20.42
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	620	3.42	18.54
PAYROLL AND TIMEKEEPING CLERKS	30	0.17	47.59
GENERAL OFFICE CLERKS	330	1.82	34.47
COMPUTER OPERATORS,EXCEPT PERIPHERAL EQUIPMENT	30	0.17	49.77
ALL OTHER OFFICE MACHINE OPERATORS	710	3.91	N/A
SWITCHBOARD OPERATORS	60	0.33	21.27
PRODUCTION, PLANNING AND EXPEDITING CLERKS	410	2.26	33.79
TRAFFIC, SHIPPING AND RECEIVING CLERKS	250	1.38	32.09
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	150	0.83	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	780	4.30	N/A
SERVICE OCCUPATIONS	210	1.16	N/A
ALL OTHER SERVICE SUPERVISORS	30	0.17	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	180	0.99	39.52
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.06	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	9510	52.40	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	540	2.98	23.53
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	50	0.28	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	10	0.06	45.82
MACHINERY MAINTENANCE MECHANICS	20	0.11	49.19
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	240	1.32	N/A
ALL OTHER PRECISION METAL WORKERS	30	0.17	N/A
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	1040	5.73	14.95
ALL OTHER PRECISION PRINTING WORKERS	920	5.07	N/A
ALL OTHER PRECISION METAL WORKERS	540	2.98	N/A
OFFSET LITHOGRAPHIC PRESS SETTRS,SET-UP OPER.	1160	6.39	24.47
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPER.	430	2.37	N/A
BINDERY MACHINE SET	280	1.54	33.44
A O PRINTING RELATED SETTERS,SET-UP OPERATORS	310	1.71	N/A
TYPESETTING COMPOSING MACHINE OPERATORS	510	2.81	26.22
PRINTING PRESS MACHINE OPERATORS AND TENDERS	1210	6.67	26.76
BINDERY MACHINE OPERATORS	420	2.31	36.17
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	290	1.60	N/A
PHOTOGRAPHIC PROCESS MACHINE OPERATORS	10	0.06	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.11	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	100	0.55	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMERCIAL PRINTING
SIC = 275
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER HAND WORKERS	240	1.32	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	160	0.88	30.73
ALL OTHER MOTOR VEHICLE OPERATORS	90	0.50	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	40	0.22	N/A
MACHINE FEEDERS AND OFFBEARERS	430	2.37	45.02
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	130	0.72	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	310	1.71	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BLANKBOOKS AND BOOKBINDING
SIC = 278
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4280	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	190	4.44	N/A
FINANCIAL MANAGERS	10	0.23	15.38
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.23	14.14
PURCHASING MANAGERS	10	0.23	11.11
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.47	10.18
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.47	6.14
INDUSTRIAL PRODUCTION MANAGERS	50	1.17	23.62
GENERAL MANAGERS AND TOP EXECUTIVES	60	1.40	13.35
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.23	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	220	5.14	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.47	5.55
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.23	20.32
COST ESTIMATORS	10	0.23	16.66
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	0.70	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.23	7.14
MECHANICAL ENGINEERS	10	0.23	15.71
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.23	14.28
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.23	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.23	15.71
COMPUTER PROGRAMMERS	10	0.23	12.49
COMPUTER PROGRAMMER AIDES	20	0.47	10.82
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.23	23.57
ARTISTS AND RELATED WORKERS	10	0.23	40.06
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.23	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	50	1.17	N/A
SALES AND RELATED OCCUPATIONS	210	4.91	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.70	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.47	34.69
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	160	3.74	10.32
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	610	14.25	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	40	0.93	14.55

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BLANKBOOKS AND BOOKBINDING
SIC = 278
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ADJUSTMENT CLERKS	60	1.40	28.86
SECRETARIES	40	0.93	13.05
RECEPTIONISTS AND INFORMATION CLERKS	10	0.23	28.57
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.23	24.99
FILE CLERKS	10	0.23	12.49
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	0.70	22.58
PROCUREMENT CLERKS	10	0.23	15.38
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	70	1.64	11.48
PAYROLL AND TIMEKEEPING CLERKS	30	0.70	16.75
BILLING, COST AND RATE CLERKS	10	0.23	29.39
GENERAL OFFICE CLERKS	30	0.70	17.11
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.23	15.71
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.23	12.49
ALL OTHER OFFICE MACHINE OPERATORS	20	0.47	N/A
SWITCHBOARD OPERATORS	10	0.23	17.67
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	10	0.23	46.90
DISPATCHERS - EXCEPT POLICE, FIRE AND AMBULANCE	10	0.23	15.71
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	0.70	6.89
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	70	1.64	7.93
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	0.93	17.15
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.23	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	1.17	N/A
SERVICE OCCUPATIONS	50	1.17	N/A
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	50	1.17	18.98
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3000	70.09	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.47	14.90
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	130	3.04	13.14
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.23	16.66
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.23	N/A
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	50	1.17	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	70	1.64	32.54
MACHINERY MAINTENANCE MECHANICS	50	1.17	22.21
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.23	31.62
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.23	N/A
CARPENTERS	10	0.23	24.84
ELECTRICIANS	20	0.47	11.54

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BLANKBOOKS AND BOOKBINDING
SIC = 278
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.23	N/A
MACHINISTS	40	0.93	30.69
ALL OTHER PRECISION METAL WORKERS	20	0.47	N/A
PRECISION COMPOSITORS, TYPESETTERS AND ARRANGERS	20	0.47	8.24
JOB PRINTERS	20	0.47	15.79
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	20	0.47	N/A
ALL OTHER PRECISION PRINTING WORKERS	150	3.50	N/A
OFFSET LITHOGRAPHIC PRESS SETTRS,SET-UP OPER.	10	0.23	N/A
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPER.	60	1.40	N/A
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	20	0.47	39.61
BINDERY MACHINE SET	280	6.54	25.75
PRINTING PRESS MACHINE OPERATORS AND TENDERS	20	0.47	37.41
BINDERY MACHINE OPERATORS	200	4.67	20.78
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	160	3.74	N/A
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	30	0.70	32.02
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.23	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	0.70	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	70	1.64	N/A
HAND ENGRAVING AND PRINTINT WORKERS	10	0.23	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	540	12.62	17.43
ALL OTHER HAND WORKERS	350	8.18	30.51
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.23	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.70	14.52
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.23	N/A
MECHANIC AND REPAIRER HELPERS	10	0.23	47.14
MACHINE FEEDERS AND OFFBEARERS	160	3.74	19.53
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	40	0.93	20.40
HAND PACKERS AND PACKAGERS	130	3.04	12.54
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	200	4.67	10.67
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRINTING TRADE SERVICES
SIC = 279
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1390	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	150	10.79	N/A
FINANCIAL MANAGERS	10	0.72	N/A
INDUSTRIAL PRODUCTION MANAGERS	40	2.88	19.11
GENERAL MANAGERS AND TOP EXECUTIVES	100	7.19	9.83
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.72	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	130	9.35	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.72	N/A
COMPUTER PROGRAMMERS	30	2.16	5.65
PHOTOGRAPHERS	10	0.72	42.64
ARTISTS AND RELATED WORKERS	50	3.60	15.23
DESIGNERS, EXCEPT INTERIOR DESIGNERS	30	2.16	29.86
ALL OTHER PROFESSIONAL,PARAPROF.,& TECHNICAL	10	0.72	N/A
SALES AND RELATED OCCUPATIONS	80	5.76	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.72	11.78
SALES AGENTS, ADVERTISING	10	0.72	39.99
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	50	3.60	11.76
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	430	30.94	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	2.16	15.62
ADJUSTMENT CLERKS	10	0.72	39.12
ADVERTISING CLERKS	10	0.72	N/A
PROOFREADERS AND COPY MARKERS	150	10.79	13.96
SECRETARIES	20	1.44	16.66
RECEPTIONISTS AND INFORMATION CLERKS	10	0.72	24.99
TYPISTS	10	0.72	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	60	4.32	11.50
GENERAL OFFICE CLERKS	10	0.72	20.35
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	1.44	N/A
DATA KEYERS, COMPOSING	50	3.60	14.22
MESSENGERS	10	0.72	10.87
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.72	12.85
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.72	48.98

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRINTING TRADE SERVICES
SIC = 279
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TRAFFIC, SHIPPING AND RECEIVING CLERKS	10	0.72	31.42
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.44	N/A
SERVICE OCCUPATIONS	10	0.72	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	10	0.72	31.62
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	590	42.45	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	70	5.04	24.89
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	10	0.72	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.72	48.98
PRECISION COMPOSITORS, TYPESETTERS AND ARRANGERS	20	1.44	7.85
PRECISION LITHOGRAPHY AND PHOTOENGRAVING WORKERS	30	2.16	42.93
PRECISION DETAIL DESIGN DECORATORS AND PAINTERS	30	2.16	30.70
PHOTOENGRAVING AND LITHOGRAPHING PHOTOGRAPHERS	30	2.16	35.65
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.72	N/A
TYPESETTING COMPOSING MACHINE OPERATORS	310	22.30	9.83
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	20	1.44	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.72	43.58
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.72	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.72	48.98
DRIVER / SALES WORKERS	10	0.72	25.00
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.72	N/A
MACHINE FEEDERS AND OFFBEARERS	10	0.72	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.72	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Chemical & Allied Products

SIC 28

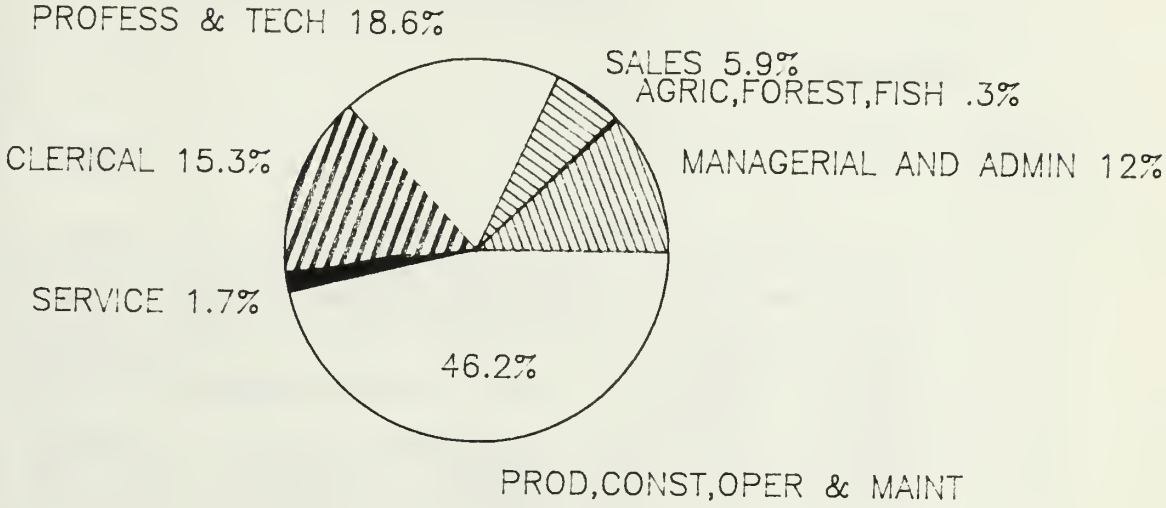
This major group includes establishments producing basic chemicals, and manufacturing products by predominantly chemical processes.

This industry group grew by 400 jobs or 2.4 percent over the 1983-1986 time frame.

Chemical technicians and technologists (except health) comprise the largest occupational grouping in this industry with 860 jobs. The largest major occupational category was production and maintenance and material handling with 8,040 jobs or 46 percent of chemical industry employment. Within the production and maintenance category, the occupation of crushing, grinding, mixing, and blending machine operators and tenders is the largest with 810 jobs or 10 percent of the category. There are 500 employed in the top executive occupations.

CHEMICALS AND ALLIED PRODUCTS (SIC-28)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Chemical Technicians & Technologists, Except Health	860
2.	Crushing, Grinding, Mixing & Blending Machine Operators Tenders	810
3.	Chemical Equipment Controller and Operators	730
4.	Secretaries	660
5.	Chemists, Except Biochemists	630
6.	All Other Machine Operators and Tenders	630
7.	Packaging, Filling Machine Operators and Tenders	570
8.	Chemical Equipment Tenders	510
9.	General Managers and Top Executives	500
10.	First Line Supervisors - Production, Operating Workers	500

OCCUPATIONS OF EMPLOYEES
CHEMICALS AND ALLIED PRODUCTS
SIC = 28
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	17380	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	2080	11.97	N/A
FINANCIAL MANAGERS	170	0.98	21.30
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	80	0.46	18.52
PURCHASING MANAGERS	60	0.35	8.62
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	320	1.84	30.94
ADMINISTRATIVE SERVICES MANAGERS	70	0.40	6.76
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	300	1.73	26.78
INDUSTRIAL PRODUCTION MANAGERS	330	1.90	13.50
GENERAL MANAGERS AND TOP EXECUTIVES	500	2.88	11.22
ALL OTHER MANAGERS AND ADMINISTRATORS	250	1.44	20.16
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	3240	18.64	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	180	1.04	14.75
BUDGET ANALYSTS	20	0.12	30.00
ALL OTHER FINANCIAL SPECIALISTS	60	0.35	39.68
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	100	0.58	19.80
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	30	0.17	36.67
COST ESTIMATORS	10	0.06	40.00
COMPLIANCE OFFICERS & ENFORCEMENT INSPECTORS	10	0.06	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	100	0.58	9.38
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.06	18.18
CHEMICAL ENGINEERS	340	1.96	14.41
CIVIL ENGINEERS, INCLUDING TRAFFIC	10	0.06	20.00
ELECTRICAL AND ELECTRONIC ENGINEERS	20	0.12	12.50
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	50	0.29	40.00
SAFETY ENGINEERS, EXCEPT MINING	10	0.06	14.29
MECHANICAL ENGINEERS	60	0.35	16.13
ALL OTHER ENGINEERS	50	0.29	35.85
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.06	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.12	22.22
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.06	N/A
DRAFTERS	20	0.12	5.26
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	160	0.92	45.68
CHEMISTS, EXCEEPT BIOCHEMISTS	630	3.62	14.65
ALL OTHER PHYSICAL SCIENTISTS	10	0.06	33.33
BIOLOGICAL SCIENTISTS	110	0.63	39.64
MEDICAL SCIENTISTS	20	0.12	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CHEMICALS AND ALLIED PRODUCTS
SIC = 28
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
BIOLOGICAL, AGRIC, FOOD TECHNOL,EXC.HEALTH	50	0.29	25.00
CHEMICAL TECHNICIANS & TECHNOLOGISTS,EXC HEALTH	860	4.95	20.67
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	20	0.12	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	90	0.52	17.39
COMPUTER PROGRAMMERS	30	0.17	46.88
COMPUTER PROGRAMMER AIDES	20	0.12	31.25
LAWYERS	30	0.17	26.92
REGISTERED NURSES	10	0.06	N/A
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	10	0.06	23.08
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	80	0.46	N/A
SALES AND RELATED OCCUPATIONS	1020	5.87	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	150	0.86	25.34
SALES ENGINEERS	80	0.46	16.00
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	450	2.59	13.81
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	290	1.67	29.21
ALL OTHER SALES AND RELATED WORKERS	60	0.35	26.67
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2660	15.30	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	150	0.86	20.39
ADJUSTMENT CLERKS	50	0.29	35.56
SECRETARIES	660	3.80	20.06
STENOGRAPHERS	10	0.06	9.09
RECEPTIONISTS AND INFORMATION CLERKS	30	0.17	19.35
TYPISTS	60	0.35	30.00
TYPISTS, WORD PROCESSING EQUIPMENT	60	0.35	37.29
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.12	31.25
FILE CLERKS	20	0.12	25.00
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	170	0.98	28.66
PROCUREMENT CLERKS	40	0.23	10.26
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	280	1.61	24.10
PAYROLL AND TIMEKEEPING CLERKS	30	0.17	25.00
BILLING, COST AND RATE CLERKS	40	0.23	32.50
GENERAL OFFICE CLERKS	320	1.84	21.07
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.23	12.50
PERIPHERAL EDP EQUIPMENT OPERATORS	20	0.12	27.27
DATA ENTRY KEYERS, EXCEPT COMPOSING	30	0.17	44.83
ALL OTHER OFFICE MACHINE OPERATORS	10	0.06	42.86
SWITCHBOARD OPERATORS	30	0.17	31.03

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CHEMICALS AND ALLIED PRODUCTS
SIC = 28
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	20	0.12	25.00
PRODUCTION, PLANNING AND EXPEDITING CLERKS	80	0.46	16.88
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.06	42.86
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	180	1.04	21.35
TRAFFIC, SHIPPING AND RECEIVING CLERKS	260	1.50	18.53
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.06	10.00
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	0.29	N/A
SERVICE OCCUPATIONS	290	1.67	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	40	0.23	12.50
GUARDS AND WATCH GUARDS	50	0.29	26.00
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	150	0.86	17.33
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	40	0.23	2.38
ALL OTHER SERVICE WORKERS	10	0.06	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	50	0.29	N/A
GARDENERS AND GROUNDSKEEPERS, EXCEPT FARM	50	0.29	4.35
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	8040	46.26	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	140	0.81	7.25
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	500	2.88	13.05
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	70	0.40	23.61
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	40	0.23	41.03
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.12	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	20	0.12	42.11
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	350	2.01	16.86
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	100	0.58	46.32
ALL OTHER MACHINERY MAINTENANCE MECHANICS	340	1.96	5.95
MILLWRIGHTS	10	0.06	10.00
MACHINERY MAINTENANCE WORKERS	30	0.17	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	180	1.04	21.43
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	30	0.17	14.81
PRECISION INSTRUMENT REPAIRERS	180	1.04	1.14
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.06	N/A
CARPENTERS	60	0.35	46.77
ELECTRICIANS	80	0.46	20.00
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	30	0.17	30.30

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CHEMICALS AND ALLIED PRODUCTS
SIC = 28
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.06	N/A
MACHINISTS	50	0.29	32.61
SHEET METAL WORKERS	10	0.06	N/A
ALL OTHER PRECISION METAL WORKERS	40	0.23	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.06	N/A
BOILER OPERATORS AND TENDERS, LOW PRESSURE	40	0.23	19.05
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	730	4.20	14.33
CHEMICAL EQUIPMENT TENDERS	510	2.93	9.31
CLEANING,WASHING,PICKLING EQUIPMENT OPS,TENDERS	50	0.29	31.25
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	810	4.66	24.75
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	110	0.63	45.79
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	570	3.28	22.16
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	160	0.92	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	630	3.62	N/A
WELDERS AND CUTTERS	20	0.12	21.74
ALL OTHER HAND WORKERS	280	1.61	N/A
CHEMICAL PLANT AND SYSTEMS OPERATORS	210	1.21	18.01
POWER DISTRIBUTORS AND DISPATCHERS	10	0.06	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	40	0.23	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	130	0.75	33.60
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	170	0.98	22.35
TANK CAR AND TRUCK LOADERS	10	0.06	21.43
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	130	0.75	15.50
CONVEYOR OPERATORS AND TENDERS	10	0.06	30.77
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.06	N/A
MACHINE FEEDERS AND OFFBEARERS	60	0.35	14.55
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	480	2.76	10.77
HAND PACKERS AND PACKAGERS	450	2.59	15.86
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	150	0.86	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.06	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
INDUSTRIAL INORGANIC CHEMICALS
SIC = 281
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1430	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	150	10.49	N/A
FINANCIAL MANAGERS	20	1.40	10.82
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.70	N/A
PURCHASING MANAGERS	10	0.70	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	1.40	8.24
ADMINISTRATIVE SERVICES MANAGERS	10	0.70	19.99
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.70	9.09
INDUSTRIAL PRODUCTION MANAGERS	30	2.10	7.71
GENERAL MANAGERS AND TOP EXECUTIVES	30	2.10	8.28
ALL OTHER MANAGERS AND ADMINISTRATORS	30	2.10	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	320	22.38	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.70	10.87
ALL OTHER FINANCIAL SPECIALISTS	10	0.70	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	1.40	11.54
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.70	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	2.80	N/A
CHEMICAL ENGINEERS	20	1.40	5.26
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.70	N/A
MECHANICAL ENGINEERS	10	0.70	19.99
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	2.10	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	100	6.99	8.86
ALL OTHER LIFE SCIENTISTS	10	0.70	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	60	4.20	8.37
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.70	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	2.10	N/A
SALES AND RELATED OCCUPATIONS	70	4.90	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.70	17.49
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	40	2.80	14.36
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	1.40	39.28
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	220	15.38	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	1.40	10.18

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
INDUSTRIAL INORGANIC CHEMICALS
SIC = 281
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ADJUSTMENT CLERKS	10	0.70	10.87
SECRETARIES	30	2.10	6.45
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	2.10	26.72
PROCUREMENT CLERKS	10	0.70	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	1.40	15.05
BILLING, COST AND RATE CLERKS	10	0.70	28.28
GENERAL OFFICE CLERKS	20	1.40	16.32
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.70	19.99
SWITCHBOARD OPERATORS	10	0.70	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.70	16.66
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	1.40	22.53
TRAFFIC, SHIPPING AND RECEIVING CLERKS	20	1.40	16.32
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	2.10	N/A
SERVICE OCCUPATIONS	20	1.40	N/A
GUARDS AND WATCH GUARDS	10	0.70	N/A
JANITORS & CLEANERS,EXC. MAIDS & HOUSE CLEANERS	10	0.70	7.69
ALL OTHER SERVICE WORKERS	10	0.70	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	650	45.45	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.70	N/A
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	50	3.50	6.00
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.70	N/A
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.70	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	2.80	24.37
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	20	1.40	19.99
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.70	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	3.50	11.96
ELECTRICIANS	10	0.70	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.70	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	90	6.29	4.53
CHEMICAL EQUIPMENT TENDERS	50	3.50	14.83
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	30	2.10	30.42
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	1.40	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	60	4.20	N/A
CHEMICAL PLANT AND SYSTEMS OPERATORS	60	4.20	4.81
POWER DISTRIBUTORS AND DISPATCHERS	10	0.70	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	10	0.70	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	1.40	41.01

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
INDUSTRIAL INORGANIC CHEMICALS
SIC = 281
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER MOTOR VEHICLE OPERATORS	20	1.40	N/A
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.70	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	40	2.80	20.93
HAND PACKERS AND PACKAGERS	20	1.40	5.88
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.70	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SOAP, CLEANERS AND TOILET GOODS
SIC = 284
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3030	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	260	8.58	N/A
FINANCIAL MANAGERS	30	0.99	18.88
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.33	N/A
PURCHASING MANAGERS	10	0.33	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.66	15.56
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.66	N/A
INDUSTRIAL PRODUCTION MANAGERS	70	2.31	5.40
GENERAL MANAGERS AND TOP EXECUTIVES	70	2.31	10.96
ALL OTHER MANAGERS AND ADMINISTRATORS	40	1.32	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	320	10.56	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	40	1.32	4.02
ALL OTHER FINANCIAL SPECIALISTS	10	0.33	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	0.99	7.40
ALL OTHER MANAGEMENT SUPPORT WORKERS	50	1.65	N/A
CHEMICAL ENGINEERS	20	0.66	14.43
ELECTRICAL AND ELECTRONIC ENGINEERS	10	0.33	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.33	N/A
MECHANICAL ENGINEERS	10	0.33	N/A
ALL OTHER ENGINEERS	20	0.66	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.33	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.33	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	30	0.99	20.28
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	60	1.98	8.83
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.33	N/A
REGISTERED NURSES	10	0.33	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	N/A	N/A
SALES AND RELATED OCCUPATIONS	150	4.95	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.66	11.11
SALES ENGINEERS	30	0.99	19.62
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	100	3.30	19.60
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	490	16.17	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SOAP, CLEANERS AND TOILET GOODS
SIC = 284
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	0.99	18.24
SECRETARIES	90	2.97	13.08
STENOGRAPHERS	10	0.33	12.85
RECEPTIONISTS AND INFORMATION CLERKS	10	0.33	N/A
TYPISTS	20	0.66	11.76
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.66	7.44
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	0.99	18.56
PROCUREMENT CLERKS	10	0.33	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	50	1.65	20.28
GENERAL OFFICE CLERKS	70	2.31	12.57
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.33	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.33	16.66
SWITCHBOARD OPERATORS	10	0.33	34.64
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.33	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.99	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	50	1.65	18.39
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	1.65	N/A
SERVICE OCCUPATIONS	60	1.98	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.33	N/A
GUARDS AND WATCH GUARDS	20	0.66	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	20	0.66	8.33
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1750	57.76	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	50	1.65	3.60
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	80	2.64	12.77
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.66	7.87
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.33	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	110	3.63	N/A
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	10	0.33	14.28
ALL OTHER MACHINERY MAINTENANCE MECHANICS	130	4.29	1.34
MILLWRIGHTS	10	0.33	N/A
MACHINERY MAINTENANCE WORKERS	20	0.66	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.66	19.81
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.33	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SOAP, CLEANERS AND TOILET GOODS
SIC = 284
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ELECTRICIANS	20	0.66	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.33	N/A
MACHINISTS	20	0.66	13.33
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.33	N/A
CHEMICAL EQUIPMENT TENDERS	30	0.99	47.39
CLEANING,WASHING,PICKLING EQUIPMENT OPS,TENDERS	10	0.33	N/A
SEPARTNG, FILTRNG, CLARFYNG, PRECIPTTNG, STILL	10	0.33	15.38
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	150	4.95	16.92
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	20	0.66	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	150	4.95	12.89
ALL OTHER MACHINE OPERATORS AND TENDERS	50	1.65	N/A
WELDERS AND CUTTERS	10	0.33	16.66
CHEMICAL PLANT AND SYSTEMS OPERATORS	20	0.66	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.33	35.35
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.33	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	80	2.64	2.53
CONVEYOR OPERATORS AND TENDERS	10	0.33	N/A
MACHINE FEEDERS AND OFFBEARERS	50	1.65	6.58
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	250	8.25	3.11
HAND PACKERS AND PACKAGERS	330	10.89	6.58
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	50	1.65	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.33	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAINTS AND ALLIED PRODUCTS
SIC = 285
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1520	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	180	11.84	N/A
FINANCIAL MANAGERS	20	1.32	19.50
PURCHASING MANAGERS	10	0.66	23.57
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	1.32	21.05
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	1.32	40.42
INDUSTRIAL PRODUCTION MANAGERS	40	2.63	21.38
GENERAL MANAGERS AND TOP EXECUTIVES	50	3.29	15.16
ALL OTHER MANAGERS AND ADMINISTRATORS	30	1.97	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	160	10.53	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	1.32	21.20
ALL OTHER FINANCIAL SPECIALISTS	10	0.66	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	1.32	21.08
CHEMISTS, EXCEEPT BIOCHEMISTS	70	4.61	17.99
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	40	2.63	27.17
COMPUTER PROGRAMMER AIDES	10	0.66	28.28
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.66	N/A
SALES AND RELATED OCCUPATIONS	110	7.24	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.66	22.58
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	70	4.61	24.65
ALL OTHER SALES AND RELATED WORKERS	20	1.32	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	360	23.68	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	1.97	16.17
ADJUSTMENT CLERKS	10	0.66	28.86
SECRETARIES	40	2.63	14.63
RECEPTIONISTS AND INFORMATION CLERKS	10	0.66	39.99
TYPISTS	10	0.66	29.39
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.66	44.72
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	40	2.63	34.35
PROCUREMENT CLERKS	10	0.66	19.99
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	2.63	22.61
PAYROLL AND TIMEKEEPING CLERKS	10	0.66	19.99
BILLING, COST AND RATE CLERKS	10	0.66	16.66

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PAINTS AND ALLIED PRODUCTS
SIC = 285
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
GENERAL OFFICE CLERKS	30	1.97	23.15
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.66	31.94
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.66	28.28
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	60	3.95	32.16
TRAFFIC, SHIPPING AND RECEIVING CLERKS	50	3.29	18.95
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.32	N/A
SERVICE OCCUPATIONS	10	0.66	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	10	0.66	39.99
ALL OTHER SERVICE WORKERS	10	0.66	N/A
PROD, CONSTR,OPERATING,MAINT & MATL HANDL OCCS	700	46.05	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.66	39.99
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	30	1.97	20.95
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.66	28.28
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	20	1.32	31.86
MACHY MAINT MECHANICS, WATER, PWR GENERATION PLA	10	0.66	49.99
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.66	34.01
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.66	35.35
ALL OTHER PRECISION METAL WORKERS	10	0.66	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	50	3.29	38.29
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	250	16.45	17.55
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	100	6.58	18.54
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	1.97	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.66	N/A
ALL OTHER HAND WORKERS	50	3.29	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.66	30.30
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKER	10	0.66	30.76
TANK CAR AND TRUCK LOADERS	10	0.66	43.30
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.66	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	1.32	34.29
HAND PACKERS AND PACKAGERS	30	1.97	22.09
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	40	2.63	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.66	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CHEMICAL PRODUCTS
SIC = 289
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3440	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	560	16.28	N/A
FINANCIAL MANAGERS	70	2.03	29.30
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.58	34.23
PURCHASING MANAGERS	10	0.29	9.09
ADMINISTRATIVE SERVICES MANAGERS	10	0.29	9.09
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	130	3.78	43.27
INDUSTRIAL PRODUCTION MANAGERS	30	0.87	33.50
GENERAL MANAGERS AND TOP EXECUTIVES	80	2.33	11.86
ALL OTHER MANAGERS AND ADMINISTRATORS	210	6.10	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	800	23.26	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.87	12.49
ALL OTHER FINANCIAL SPECIALISTS	30	0.87	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.58	22.53
COMPLIANCE OFFICERS & ENFORCEMENT INSPECTORS	10	0.29	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.58	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.29	N/A
CHEMICAL ENGINEERS	60	1.74	13.81
ELECTRICAL AND ELECTRONIC ENGINEERS	10	0.29	39.99
MECHANICAL ENGINEERS	10	0.29	N/A
ALL OTHER ENGINEERS	40	1.16	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.29	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.29	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	130	3.78	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	90	2.62	12.30
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	250	7.27	36.17
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.29	N/A
LAWYERS	20	0.58	42.00
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	10	0.29	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	70	2.03	N/A
SALES AND RELATED OCCUPATIONS	150	4.36	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.87	39.97
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	60	1.74	29.46
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	50	1.45	44.58
ALL OTHER SALES AND RELATED WORKERS	20	0.58	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CHEMICAL PRODUCTS
SIC = 289
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	650	18.90	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.58	49.60
SECRETARIES	230	6.69	36.40
TYPISTS	10	0.29	44.53
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.58	40.18
PROCUREMENT CLERKS	10	0.29	18.18
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	70	2.03	26.91
BILLING, COST AND RATE CLERKS	20	0.58	32.65
GENERAL OFFICE CLERKS	120	3.49	29.11
ALL OTHER OFFICE MACHINE OPERATORS	30	0.87	N/A
SWITCHBOARD OPERATORS	10	0.29	47.14
MAIL CLERKS, EXC MAIL MACH OP & POSTAL SERVICE	10	0.29	42.42
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.29	25.75
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.29	36.42
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	1.16	25.30
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	1.16	N/A
SERVICE OCCUPATIONS	30	0.87	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.29	34.99
ALL OTHER PROTECTIVE SERVICE WORKERS	10	0.29	N/A
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.29	N/A
ALL OTHER SERVICE WORKERS	*	N/A	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1230	35.76	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	100	2.91	35.25
A O 1ST LINE SUPERS - PROD,CONSTR,MAINTENANCE	30	0.87	N/A
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	10	0.29	N/A
ALL OTHER MACHINERY MAINTENANCE MECHANICS	60	1.74	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.58	17.64
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.29	N/A
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	20	0.58	48.09
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	30	0.87	N/A
MACHINISTS	10	0.29	39.22

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CHEMICAL PRODUCTS
SIC = 289
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PRECISION METAL WORKERS	10	0.29	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	70	2.03	47.24
CHEMICAL EQUIPMENT TENDERS	30	0.87	41.90
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	170	4.94	22.76
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	130	3.78	31.36
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	1.45	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	300	8.72	N/A
WELDERS AND CUTTERS	10	0.29	38.56
ALL OTHER HAND WORKERS	60	1.74	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	30	0.87	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.29	31.18
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.29	45.50
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.29	42.85
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	0.87	41.49
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	40	1.16	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Rubber and Miscellaneous Plastic Products

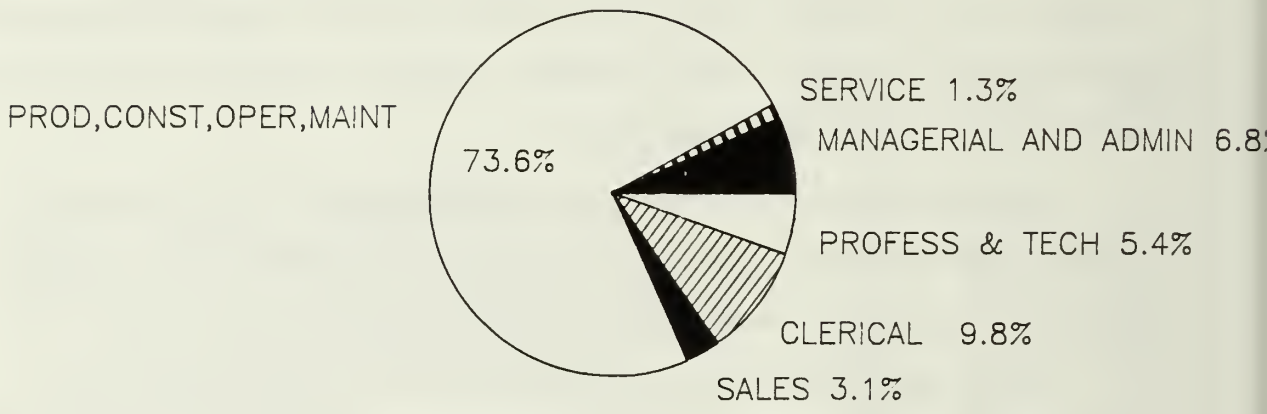
SIC 30

This major group includes establishments manufacturing from natural synthetic, or reclaimed rubber, gutta percha, balata,or grutta siak, rubber products such as tires, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries.

Employment in the major group at approximately 29,500 represented a slight decline from 1983 levels. The industry continued to represent 4.8 percent of the state's manufacturing employment as it did in 1983.

The 10 top ranked occupations includes 9 in the production and maintenance category with 21,750 or 6 percent of the industry employment. The number one occupation is plastic molding and casting machine operators and tenders with 4,460 workers. Other important occupations are assemblers, fabricators, except machine electrical, 3,000 workers, and hand packers and packagers with 1,210 workers. The only non production and maintenance occupation among the 10 largest was general managers and top executives with 770 people.

RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS (SIC-30)
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Plastic Molding, Casting Machine Operators & Tenders	4460
2.	Assemblers, Fabricators, Except Machine Electrical, Electronic	3000
3.	Hand Packers and Packagers	1210
4.	First Line Supervisors - Production, Operating	1040
5.	All Other Machine Operators and Tenders	940
6.	Production Inspectors, Testers, Graders, Sorters, Samplers, Weighers	830
7.	General Managers and Top Executives	770
8.	All Other Metal, Plastic Machine Setters, Set - Up Operators	750
9.	All Other Metal & Plastic Machine Operators and Tender	710
10.	All Other Helpers, Laborers, Material Movers	620

OCCUPATIONS OF EMPLOYEES
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
SIC = 30
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	29540	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	2010	6.80	N/A
FINANCIAL MANAGERS	180	0.61	12.57
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	90	0.30	15.91
PURCHASING MANAGERS	70	0.24	20.27
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	150	0.51	12.34
ADMINISTRATIVE SERVICES MANAGERS	30	0.10	36.36
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	140	0.47	17.73
INDUSTRIAL PRODUCTION MANAGERS	350	1.18	13.79
GENERAL MANAGERS AND TOP EXECUTIVES	770	2.61	12.50
ALL OTHER MANAGERS AND ADMINISTRATORS	230	0.78	27.11
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1600	5.42	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	130	0.44	19.70
ALL OTHER FINANCIAL SPECIALISTS	50	0.17	5.88
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	110	0.37	19.82
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	40	0.14	25.64
COST ESTIMATORS	80	0.27	22.08
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	0.20	19.67
CHEMICAL ENGINEERS	40	0.14	35.71
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	80	0.27	20.00
MECHANICAL ENGINEERS	170	0.58	25.15
ALL OTHER ENGINEERS	20	0.07	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.07	45.00
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	30	0.10	31.25
DRAFTERS	60	0.20	23.64
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	150	0.51	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	60	0.20	31.75
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	130	0.44	28.24
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	90	0.30	19.32
COMPUTER PROGRAMMERS	40	0.14	25.64
COMPUTER PROGRAMMER AIDES	40	0.14	30.56
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.03	N/A
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.03	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	190	0.64	N/A
SALES AND RELATED OCCUPATIONS	900	3.05	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
SIC = 30
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	230	0.78	20.78
SALES ENGINEERS	20	0.07	37.50
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	170	0.58	40.23
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	350	1.18	21.97
ALL OTHER SALES AND RELATED WORKERS	140	0.47	20.00
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2880	9.75	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	140	0.47	23.19
ADJUSTMENT CLERKS	220	0.74	22.52
SECRETARIES	460	1.56	15.80
RECEPTIONISTS AND INFORMATION CLERKS	100	0.34	24.74
TYPISTS	60	0.20	30.00
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	50	0.17	30.00
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	60	0.20	42.37
PROCUREMENT CLERKS	20	0.07	27.27
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	350	1.18	20.52
PAYROLL AND TIMEKEEPING CLERKS	100	0.34	18.45
BILLING, COST AND RATE CLERKS	60	0.20	31.15
GENERAL OFFICE CLERKS	250	0.85	35.10
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	50	0.17	26.09
DATA ENTRY KEYERS, EXCEPT COMPOSING	60	0.20	25.00
SWITCHBOARD OPERATORS	50	0.17	21.74
PRODUCTION, PLANNING AND EXPEDITING CLERKS	200	0.68	39.49
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	200	0.68	16.92
TRAFFIC, SHIPPING AND RECEIVING CLERKS	410	1.39	15.02
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.07	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.14	N/A
SERVICE OCCUPATIONS	390	1.32	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	100	0.34	23.76
GUARDS AND WATCH GUARDS	50	0.17	29.79
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	240	0.81	16.18
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	21750	73.63	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	130	0.44	24.63
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	1040	3.52	12.01
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	60	0.20	48.44

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
SIC = 30
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	90	0.30	41.57
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	30	0.10	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	260	0.88	42.47
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	830	2.81	14.60
MACHINERY MAINTENANCE MECHANICS	470	1.59	17.99
MILLWRIGHTS	70	0.24	20.00
MACHINERY MAINTENANCE WORKERS	70	0.24	41.67
MAINTENANCE REPAIRERS, GENERAL UTILITY	340	1.15	23.24
PRECISION INSTRUMENT REPAIRERS	30	0.10	7.14
CARPENTERS	10	0.03	35.71
ELECTRICIANS	110	0.37	20.00
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	30	0.10	9.09
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.03	25.00
TOOL AND DIE MAKERS	260	0.88	25.00
MACHINISTS	250	0.85	23.81
TOOL GRNDRS,FLRS,SHRPNRS,OTHR PRECISION WORKERS	30	0.10	28.00
ALL OTHER PRECISION METAL WORKERS	10	0.03	14.29
ALL OTHER PRECISION METAL WORKERS	70	0.24	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	90	0.30	46.51
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	10	0.03	45.45
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	250	0.85	35.22
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	170	0.58	47.95
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	30	0.10	27.59
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	10	0.03	45.45
PLASTIC MOLDING & CASTNG MACHINE SETTERS, SET UP	290	0.98	35.17
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	4460	15.10	16.44
A O METAL,PLASTIC MACH SETTERS,SET-UP OPERATORS	750	2.54	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	710	2.40	N/A
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPERATORS	130	0.44	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	20	0.07	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	510	1.73	48.14
SEWING MACHINE OPERATOR, GARMENT	80	0.27	N/A
SHOE SEWING MACHINE OPERATORS AND TENDERS	430	1.46	38.28
FURNACE, KILN, ETC OPERATORS	30	0.10	24.24
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.03	20.00
COATING, PAINTING,SPRAYING MCH OPERATORS,TENDERS	100	0.34	35.58
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDERS	60	0.20	43.86
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	200	0.68	33.33
EXTRUDING AND OTHER MACHINE OPERATORS	510	1.73	19.53
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	280	0.95	46.76
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	460	1.56	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
SIC = 30
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER MACHINE OPERATORS AND TENDERS	940	3.18	N/A
WELDERS AND CUTTERS	30	0.10	23.33
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	3000	10.16	23.17
ALL OTHER HAND WORKERS	520	1.76	N/A
STATIONARY ENGINEERS	30	0.10	16.00
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	60	0.20	32.76
TRUCK DRIVERS,LIGHT,INCL DELIVERY, ROUTE WORKERS	60	0.20	39.34
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	260	0.88	33.07
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	20	0.07	N/A
MACHINE FEEDERS AND OFFBEARERS	600	2.03	46.57
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	590	2.00	32.14
HAND PACKERS AND PACKAGERS	1210	4.10	25.39
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	620	2.10	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	60	0.20	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED RUBBER PRODUCTS, NEC
SIC = 306
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5680	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	390	6.87	N/A
FINANCIAL MANAGERS	40	0.70	11.66
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.35	20.03
PURCHASING MANAGERS	20	0.35	20.72
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.35	16.13
ADMINISTRATIVE SERVICES MANAGERS	10	0.18	44.72
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.53	15.45
INDUSTRIAL PRODUCTION MANAGERS	90	1.58	14.85
GENERAL MANAGERS AND TOP EXECUTIVES	140	2.46	19.44
ALL OTHER MANAGERS AND ADMINISTRATORS	20	0.35	33.79
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	480	8.45	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.53	29.84
ALL OTHER FINANCIAL SPECIALISTS	10	0.18	17.67
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.18	23.07
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.18	14.28
COST ESTIMATORS	20	0.35	13.81
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.18	37.11
CHEMICAL ENGINEERS	20	0.35	23.32
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.53	12.87
MECHANICAL ENGINEERS	20	0.35	19.04
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	40	0.70	32.93
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.18	17.67
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.18	31.62
DRAFTERS	10	0.18	33.16
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	40	0.70	29.80
CHEMISTS, EXCEEPT BIOCHEMISTS	40	0.70	20.00
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	90	1.58	15.07
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.18	15.38
COMPUTER PROGRAMMERS	10	0.18	27.66
COMPUTER PROGRAMMER AIDES	10	0.18	39.96
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	0.53	N/A
SALES AND RELATED OCCUPATIONS	200	3.52	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	60	1.06	33.12
SALES ENGINEERS	10	0.18	45.17

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED RUBBER PRODUCTS, NEC
SIC = 306
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	60	1.06	31.19
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	60	1.06	25.86
ALL OTHER SALES AND RELATED WORKERS	20	0.35	25.24
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	600	10.56	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	40	0.70	21.54
ADJUSTMENT CLERKS	20	0.35	31.13
SECRETARIES	100	1.76	17.97
RECEPTIONISTS AND INFORMATION CLERKS	20	0.35	27.48
TYPISTS	20	0.35	31.22
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.18	25.75
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	0.53	24.38
PROCUREMENT CLERKS	10	0.18	19.99
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	60	1.06	19.58
PAYROLL AND TIMEKEEPING CLERKS	20	0.35	23.38
BILLING, COST AND RATE CLERKS	20	0.35	20.00
GENERAL OFFICE CLERKS	50	0.88	24.65
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.18	31.71
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.18	39.97
SWITCHBOARD OPERATORS	10	0.18	27.66
PRODUCTION, PLANNING AND EXPEDITING CLERKS	50	0.88	16.69
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.18	45.06
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.53	30.90
TRAFFIC, SHIPPING AND RECEIVING CLERKS	80	1.41	16.66
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.35	N/A
SERVICE OCCUPATIONS	50	0.88	N/A
ALL OTHER PROTECTIVE SERVICE WORKERS	20	0.35	N/A
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	30	0.53	25.95
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3960	69.72	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	40	0.70	14.04
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	240	4.23	8.72
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	30	0.53	38.33
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.18	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	40	0.70	38.76
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	280	4.93	16.77
MACHINERY MAINTENANCE MECHANICS	90	1.58	15.98

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED RUBBER PRODUCTS, NEC
SIC = 306
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MILLWRIGHTS	60	1.06	17.27
MACHINERY MAINTENANCE WORKERS	10	0.18	35.35
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.70	22.73
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.18	N/A
CARPENTERS	10	0.18	19.24
ELECTRICIANS	40	0.70	14.70
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	30	0.53	10.69
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.18	30.61
TOOL AND DIE MAKERS	30	0.53	35.63
MACHINISTS	70	1.23	29.66
ALL OTHER PRECISION METAL WORKERS	30	0.53	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	20	0.35	41.63
ROLLING MACHINE SETTERS, METAL AND PLASTIC	30	0.53	48.33
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	70	1.23	33.01
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	20	0.35	46.81
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	60	1.06	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	150	2.64	N/A
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	30	0.53	46.13
TEXTILE MACHINE OPERATORS AND TENDERS	130	2.29	34.18
FURNACE, KILN, ETC OPERATORS	30	0.53	25.17
BOILER OPERATORS AND TENDERS, LOW PRESSURE	30	0.53	40.82
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	40	0.70	27.14
CUTTING,SLICING MACHINE SETTERS,SET-UP OPERATORS	30	0.53	44.82
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	80	1.41	32.17
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	100	1.76	35.68
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	170	2.99	29.02
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	170	2.99	30.76
EXTRUDING AND OTHER MACHINE OPERATORS	510	8.98	19.61
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	110	1.94	46.28
ALL OTHER MACHINE OPERATORS AND TENDERS	250	4.40	N/A
WELDERS AND CUTTERS	30	0.53	23.57
HAND CUTTERS AND TRIMMERS	60	1.06	40.71
ALL OTHER HAND WORKERS	60	1.06	N/A
STATIONARY ENGINEERS	30	0.53	17.43
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.18	28.57
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	50	0.88	24.49
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.35	N/A
MACHINE FEEDERS AND OFFBEARERS	90	1.58	41.62
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	50	0.88	24.47
HAND PACKERS AND PACKAGERS	30	0.53	38.98
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	470	8.27	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.18	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PLASTICS PRODUCTS
SIC = 307
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	22390	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1500	6.70	N/A
FINANCIAL MANAGERS	140	0.63	13.33
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	60	0.27	15.46
PURCHASING MANAGERS	50	0.22	22.95
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	110	0.49	13.39
ADMINISTRATIVE SERVICES MANAGERS	20	0.09	40.61
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	100	0.45	19.79
INDUSTRIAL PRODUCTION MANAGERS	240	1.07	14.26
GENERAL MANAGERS AND TOP EXECUTIVES	600	2.68	11.71
ALL OTHER MANAGERS AND ADMINISTRATORS	180	0.80	31.65
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	910	4.06	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	70	0.31	21.95
ALL OTHER FINANCIAL SPECIALISTS	20	0.09	7.21
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	80	0.36	23.23
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.09	41.01
COST ESTIMATORS	50	0.22	30.38
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	0.18	20.41
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.13	31.26
MECHANICAL ENGINEERS	140	0.63	27.12
ALL OTHER ENGINEERS	30	0.13	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.09	33.70
DRAFTERS	40	0.18	29.82
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	60	0.27	N/A
ALL OTHER PHYSICAL SCIENTISTS	20	0.09	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	40	0.18	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	50	0.22	28.88
COMPUTER PROGRAMMERS	20	0.09	27.76
COMPUTER PROGRAMMER AIDES	10	0.04	44.03
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	160	0.71	N/A
SALES AND RELATED OCCUPATIONS	510	2.28	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	150	0.67	19.38
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	110	0.49	44.90
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	180	0.80	33.70
ALL OTHER SALES AND RELATED WORKERS	60	0.27	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PLASTICS PRODUCTS
SIC = 307
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2020	9.02	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	90	0.40	24.85
ADJUSTMENT CLERKS	170	0.76	25.43
SECRETARIES	330	1.47	16.76
RECEPTIONISTS AND INFORMATION CLERKS	80	0.36	24.96
TYPISTS	30	0.13	43.45
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	30	0.13	33.66
PROCUREMENT CLERKS	20	0.09	31.86
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	250	1.12	23.55
PAYROLL AND TIMEKEEPING CLERKS	80	0.36	20.52
BILLING, COST AND RATE CLERKS	40	0.18	39.37
GENERAL OFFICE CLERKS	170	0.76	44.40
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.09	35.05
DATA ENTRY KEYERS, EXCEPT COMPOSING	40	0.18	28.72
SWITCHBOARD OPERATORS	30	0.13	21.25
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	130	0.58	18.37
TRAFFIC, SHIPPING AND RECEIVING CLERKS	320	1.43	15.01
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	140	0.63	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	0.22	N/A
SERVICE OCCUPATIONS	330	1.47	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	100	0.45	24.26
GUARDS AND WATCH GUARDS	20	0.09	14.43
JANITORS & CLEANERS,EXC. MAIDS & HOUSE CLEANERS	200	0.89	15.16
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	17120	76.46	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	90	0.40	30.60
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	770	3.44	13.53
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	80	0.36	43.21
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	50	0.22	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	220	0.98	44.03
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	510	2.28	14.72
MACHINERY MAINTENANCE MECHANICS	370	1.65	18.81
MACHINERY MAINTENANCE WORKERS	60	0.27	46.29
MAINTENANCE REPAIRERS, GENERAL UTILITY	300	1.34	23.45
PRECISION INSTRUMENT REPAIRERS	30	0.13	3.99

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PLASTICS PRODUCTS
SIC = 307
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ELECTRICIANS	60	0.27	25.38
TOOL AND DIE MAKERS	220	0.98	23.93
MACHINISTS	170	0.76	23.66
TOOL GRNDRS,FLRS,SHRPNRS,OTHR PRECISION WORKERS	20	0.09	32.24
PREC PATTERNMKRS, MODEL MAKRS, LAYT WORKRS, CUTT	10	0.04	41.66
ALL OTHER PRECISION METAL WORKERS	20	0.09	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	70	0.31	49.19
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	240	1.07	36.00
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	290	1.30	34.91
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	4360	19.47	15.60
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	680	3.04	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	690	3.08	N/A
ALL OTHER PRINTING PRESS SETTERS,SET-UP OPERATORS	130	0.58	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	20	0.09	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	510	2.28	48.17
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	40	0.18	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	170	0.76	47.24
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	250	1.12	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	600	2.68	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	2900	12.95	23.03
ALL OTHER HAND WORKERS	450	2.01	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	50	0.22	34.61
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	50	0.22	43.03
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	210	0.94	35.51
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.04	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	30	0.13	N/A
MACHINE FEEDERS AND OFFBEARERS	510	2.28	47.55
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	530	2.37	33.45
HAND PACKERS AND PACKAGERS	1170	5.23	25.35
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	150	0.67	49.58
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.04	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Leather and Leather Products

SIC 31

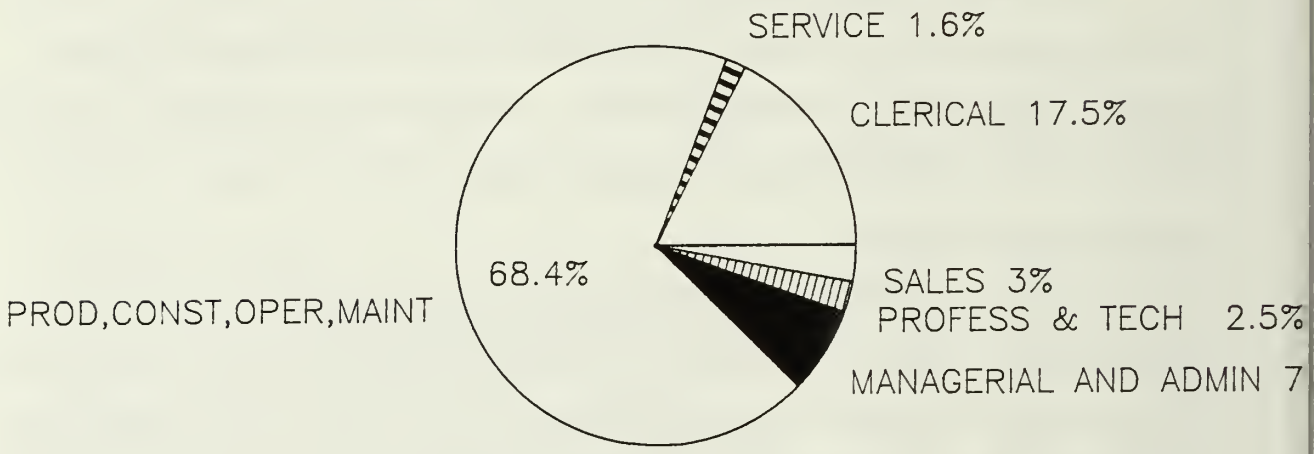
This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products. Products include footwear (excluding rubber) and footwear components, leather gloves, mittens, luggage, handbags and other leather goods.

Once a major component of the nondurable goods sector in the Massachusetts economy, the leather and leather products group now employ only 10,000 workers in Massachusetts. The industry continued to lose employment, suffering nearly a 40 percent drop between 1983 and 1986 as foreign imports of shoes and leather goods continue to increase their penetration of the United States market.

Jobs in the production, construction and maintenance occupational grouping represent over 68 percent of the industry employment, although there was a job loss of 5,250 workers or 42 percent in this occupational grouping over the 1983-1986 time frame.

LEATHER AND LEATHER PRODUCTS (SIC-31)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Shoe and Leather Workers and Repairers	1660
2.	Shoe Sewing Machine Operators and Tenders	930
3.	All Other Helpers, Laborers, Material Movers	660
4.	All Other Machine Operators and Tenders	440
5.	Assemblers, Fabricators, Except Machine Electrical, Electronic	430
6.	Traffic, Shipping and Receiving Clerks	290
7.	General Managers and Top Executive	260
8.	Cementing and Gluing Machine Operators and Tender	250
9.	Hand Cutters and Trimmers	250

OCCUPATIONS OF EMPLOYEES
LEATHER AND LEATHER PRODUCTS
SIC = 31
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	10680	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	750	7.02	N/A
FINANCIAL MANAGERS	70	0.66	13.43
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.28	11.76
PURCHASING MANAGERS	30	0.28	10.00
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	70	0.66	16.44
ADMINISTRATIVE SERVICES MANAGERS	50	0.47	31.11
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.19	11.11
INDUSTRIAL PRODUCTION MANAGERS	140	1.31	16.18
GENERAL MANAGERS AND TOP EXECUTIVES	260	2.43	12.64
ALL OTHER MANAGERS AND ADMINISTRATORS	80	0.75	26.83
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	270	2.53	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	70	0.66	34.29
ALL OTHER FINANCIAL SPECIALISTS	10	0.09	25.00
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	0.28	44.83
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.09	10.00
COST ESTIMATORS	10	0.09	12.50
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.09	20.00
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.09	8.33
MECHANICAL ENGINEERS	10	0.09	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.09	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.09	16.67
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.09	10.00
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.09	N/A
COMPUTER PROGRAMMERS	20	0.19	13.64
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.19	10.00
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	40	0.37	N/A
SALES AND RELATED OCCUPATIONS	320	3.00	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	50	0.47	40.38
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.19	33.33
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	170	1.59	32.74
SALESPERSONS, RETAIL TRADE	40	0.37	37.21
ALL OTHER SALES AND RELATED WORKERS	40	0.37	28.21
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1870	17.51	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LEATHER AND LEATHER PRODUCTS
SIC = 31
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	110	1.03	16.67
ADJUSTMENT CLERKS	90	0.84	22.34
SECRETARIES	140	1.31	21.90
RECEPTIONISTS AND INFORMATION CLERKS	10	0.09	22.22
TYPISTS	20	0.19	25.00
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.19	29.41
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.09	22.22
FILE CLERKS	30	0.28	13.79
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	70	0.66	14.71
PROCUREMENT CLERKS	20	0.19	6.25
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	130	1.22	22.90
PAYROLL AND TIMEKEEPING CLERKS	60	0.56	6.45
BILLING, COST AND RATE CLERKS	80	0.75	37.97
GENERAL OFFICE CLERKS	180	1.69	15.91
BILLING, POSTING, CALCULATING MACH. OPERATORS	30	0.28	28.00
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.19	30.00
DATA ENTRY KEYERS, EXCEPT COMPOSING	100	0.94	15.79
SWITCHBOARD OPERATORS	30	0.28	10.34
PRODUCTION, PLANNING AND EXPEDITING CLERKS	40	0.37	7.50
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	230	2.15	27.16
TRAFFIC, SHIPPING AND RECEIVING CLERKS	290	2.72	23.69
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	150	1.40	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.37	N/A
SERVICE OCCUPATIONS	170	1.59	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	30	0.28	3.13
GUARDS AND WATCH GUARDS	60	0.56	27.59
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	70	0.66	6.06
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.09	8.33
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	7300	68.35	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	30	0.28	26.47
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	180	1.69	15.76
1ST LINE SUPERS - HLPRS,LABRRS,MATL MOVERS	40	0.37	37.21
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.09	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	20	0.19	5.26
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	230	2.15	47.21

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LEATHER AND LEATHER PRODUCTS
SIC = 31
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	20	0.19	16.67
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	30	0.28	19.23
ALL OTHER MACHINERY MAINTENANCE MECHANICS	30	0.28	23.33
MAINTENANCE REPAIRERS, GENERAL UTILITY	60	0.56	25.81
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	50	0.47	N/A
CARPENTERS	10	0.09	11.11
ELECTRICIANS	10	0.09	11.11
MACHINISTS	10	0.09	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.09	N/A
SHOE AND LEATHER WORKERS AND REPAIRERS	1660	15.54	9.10
PRECISION DYERS	30	0.28	37.93
A O PRECISION TEXTILE,APPAREL,FURNISHNGS WORKERS	70	0.66	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.09	33.33
PLASTIC MOLDNG & CASTNG MACHNE SETTERS,SET-UP	10	0.09	28.57
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	30	0.28	18.75
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	50	0.47	N/A
TEXTILE MACHINE OPERATORS AND TENDERS	10	0.09	9.09
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	140	1.31	N/A
SEWING MACHINE OPERATOR, GARMENT	80	0.75	12.20
SEWING MACHINE OPERATOR, NON-GARMENT	170	1.59	26.51
SHOE SEWING MACHINE OPERATORS AND TENDERS	930	8.71	7.41
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	10	0.09	10.00
FURNACE, KILN, ETC OPERATORS	20	0.19	46.67
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.09	40.00
CUTTING,SLICING MACHINE SETTERS,SET-UP OPERATORS	100	0.94	45.63
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	170	1.59	44.12
COATING,PAINTING,SPRAYING MCH SETTRS,SET-UP	20	0.19	38.10
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDER	40	0.37	5.26
CEMENTING AND GLUING MACHINE OPERATORS AND TENDER	250	2.34	33.33
CLEANING, WASHING, PICKLING EQUIPMENT OPS,TENDER	40	0.37	22.86
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	80	0.75	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	440	4.12	N/A
HAND SEWERS	60	0.56	8.33
HAND CUTTERS AND TRIMMERS	250	2.34	38.00
PORTABLE MACHINE CUTTERS	10	0.09	18.18
ASSMBLRS,FABRICTRS,EXC MCH ELCTRC, ELCTRNC,	430	4.03	21.43
ALL OTHER HAND WORKERS	140	1.31	10.00
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	0.19	5.88
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKER	10	0.09	16.67
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.28	22.58
CONVEYOR OPERATORS AND TENDERS	20	0.19	37.50

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LEATHER AND LEATHER PRODUCTS
SIC = 31
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FEEDERS AND OFFBEARERS	140	1.31	26.57
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	220	2.06	26.05
HAND PACKERS AND PACKAGERS	230	2.15	18.67
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	660	6.18	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LEATHER TANNING AND FINISHING
SIC = 311
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1190	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	120	10.08	N/A
FINANCIAL MANAGERS	10	0.84	N/A
INDUSTRIAL PRODUCTION MANAGERS	40	3.36	22.73
GENERAL MANAGERS AND TOP EXECUTIVES	60	5.04	16.26
ALL OTHER MANAGERS AND ADMINISTRATORS	20	1.68	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	20	1.68	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.84	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.84	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.84	N/A
SALES AND RELATED OCCUPATIONS	20	1.68	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	10	0.84	46.83
ALL OTHER SALES AND RELATED WORKERS	*	N/A	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	120	10.08	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	1.68	28.28
ALL OTHER SECRETARIES	20	1.68	N/A
GENERAL OFFICE CLERKS	20	1.68	45.55
TRAFFIC, SHIPPING AND RECEIVING CLERKS	20	1.68	34.61
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	3.36	N/A
SERVICE OCCUPATIONS	10	0.84	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.84	N/A
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	910	76.47	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.84	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	40	3.36	20.15
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	20	1.68	44.63
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.84	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	1.68	32.77
SHOE AND LEATHER WORKERS AND REPAIRERS	180	15.13	11.00

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
LEATHER TANNING AND FINISHING
SIC = 311
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRECISION DYERS	30	2.52	40.40
SHOE SEWING MACHINE OPERATORS AND TENDERS	10	0.84	N/A
FURNACE, KILN, ETC OPERATORS	10	0.84	N/A
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDERS	20	1.68	N/A
CEMENTING AND GLUING MACHINE OPERATORS AND TENDERS	20	1.68	28.64
CLEANING, WASHING,PICKLING EQUIPMENT OPS,TENDERS	10	0.84	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	80	6.72	44.92
ALL OTHER MACHINE OPERATORS AND TENDERS	110	9.24	N/A
ALL OTHER HAND WORKERS	90	7.56	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.84	N/A
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.84	N/A
MACHINE FEEDERS AND OFFBEARERS	110	9.24	27.17
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	10	0.84	24.32
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	130	10.92	23.39
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BOOT AND SHOE CUT STOCK AND FINDINGS
SIC = 313
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1790	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	180	10.06	N/A
FINANCIAL MANAGERS	10	0.56	17.32
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.56	39.99
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.56	39.99
INDUSTRIAL PRODUCTION MANAGERS	40	2.23	15.61
GENERAL MANAGERS AND TOP EXECUTIVES	110	6.15	14.76
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.56	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	60	3.35	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	1.68	34.18
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.56	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.56	16.66
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.56	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.56	N/A
SALES AND RELATED OCCUPATIONS	30	1.68	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	1.12	28.82
ALL OTHER SALES AND RELATED WORKERS	10	0.56	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	180	10.06	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.56	39.96
SECRETARIES	20	1.12	26.31
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.56	34.99
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	1.12	27.24
GENERAL OFFICE CLERKS	20	1.12	49.99
TRAFFIC, SHIPPING AND RECEIVING CLERKS	50	2.79	25.90
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	1.12	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	1.68	N/A
SERVICE OCCUPATIONS	20	1.12	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.56	N/A
JANITORS & CLEANERS, EXC. AIDS & HOUSE CLEANERS	10	0.56	16.66
ALL OTHER SERVICE WORKERS	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BOOT AND SHOE CUT STOCK AND FINDINGS
SIC = 313
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1320	73.74	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	40	2.23	29.42
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	100	5.59	N/A
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	10	0.56	N/A
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.56	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.56	38.56
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.56	N/A
ELECTRICIANS	10	0.56	N/A
A O CONSTRUCTION,EXTRACTIVE WORKERS,EXC HELPER	10	0.56	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.56	N/A
SHOE AND LEATHER WORKERS AND REPAIRERS	180	10.06	26.93
ALL OTHER PRECISION METAL WORKERS	10	0.56	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.56	N/A
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	120	6.70	N/A
SEWING MACHINE OPERATOR, GARMENT	10	0.56	34.64
SHOE SEWING MACHINE OPERATORS AND TENDERS	10	0.56	31.13
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.56	39.99
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	90	5.03	44.05
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	10	0.56	N/A
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	100	5.59	46.03
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	1.68	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	300	16.76	N/A
HAND SEWERS	10	0.56	36.05
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	100	5.59	36.70
ALL OTHER HAND WORKERS	30	1.68	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.56	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.56	N/A
MACHINE FEEDERS AND OFFBEARERS	20	1.12	23.81
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	20	1.12	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	30	1.68	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.56	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FOOTWEAR, EXCEPT RUBBER
SIC = 314
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5770	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	290	5.03	N/A
FINANCIAL MANAGERS	30	0.52	14.40
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.35	8.24
PURCHASING MANAGERS	20	0.35	12.49
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	50	0.87	18.25
ADMINISTRATIVE SERVICES MANAGERS	40	0.69	39.57
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.17	18.84
INDUSTRIAL PRODUCTION MANAGERS	40	0.69	18.95
GENERAL MANAGERS AND TOP EXECUTIVES	40	0.69	10.89
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.87	18.98
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	120	2.08	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.35	29.15
ALL OTHER FINANCIAL SPECIALISTS	10	0.17	19.99
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.17	28.78
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.17	17.67
COST ESTIMATORS	10	0.17	19.99
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.17	14.14
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.17	N/A
COMPUTER PROGRAMMERS	10	0.17	22.58
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.17	40.82
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	0.52	N/A
SALES AND RELATED OCCUPATIONS	140	2.43	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.35	44.19
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	60	1.04	33.55
SALESPERSONS, RETAIL TRADE	10	0.17	43.30
ALL OTHER SALES AND RELATED WORKERS	60	1.04	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1130	19.58	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.87	7.69
ADJUSTMENT CLERKS	60	1.04	17.05
SECRETARIES	70	1.21	15.21
TYPISTS	10	0.17	28.78
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.17	22.58

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FOOTWEAR, EXCEPT RUBBER
SIC = 314
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.17	24.74
FILE CLERKS	10	0.17	10.10
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	50	0.87	8.33
PROCUREMENT CLERKS	10	0.17	7.14
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	70	1.21	10.05
PAYROLL AND TIMEKEEPING CLERKS	50	0.87	3.76
BILLING, COST AND RATE CLERKS	40	0.69	26.52
GENERAL OFFICE CLERKS	100	1.73	7.82
BILLING, POSTING, CALCULATING MACH. OPERATORS	20	0.35	22.36
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.35	16.32
DATA ENTRY KEYERS, EXCEPT COMPOSING	80	1.39	13.06
SWITCHBOARD OPERATORS	20	0.35	5.26
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.35	11.18
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	220	3.81	27.91
TRAFFIC, SHIPPING AND RECEIVING CLERKS	90	1.56	22.06
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	90	1.56	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.69	N/A
SERVICE OCCUPATIONS	110	1.91	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.17	10.10
GUARDS AND WATCH GUARDS	50	0.87	31.08
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	30	0.52	9.58
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.17	11.78
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3980	68.98	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.35	41.78
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	90	1.56	10.65
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.52	47.10
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.17	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	20	0.35	5.26
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	0.69	25.69
MACHINERY MAINTENANCE MECHANICS, TEXTILE MACHINE	10	0.17	35.35
MACHINERY MAINTENANCE MECHANICS, SEWING MACHINES	20	0.35	14.14
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.17	22.04
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.35	24.95
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.17	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.17	N/A
FABRIC, APPAREL PATTERNMAKERS, LAYOUT WORKERS	10	0.17	24.84

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FOOTWEAR, EXCEPT RUBBER
SIC = 314
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SHOE AND LEATHER WORKERS AND REPAIRERS	1180	20.45	6.30
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	10	0.17	28.57
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	30	0.52	17.95
TEXTILE MACHINE OPERATORS AND TENDERS	10	0.17	N/A
SHOE SEWING MACHINE OPERATORS AND TENDERS	880	15.25	7.33
PRESSING MCH OPERATORS, TEXTILE, GARMENT & RELAT	10	0.17	N/A
CUTTING,SLICING MACHINE SETTERS,SET-UP	60	1.04	41.30
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	40	0.69	38.80
COATING, PAINTING, SPRAYING MCH OPERATORS,TENDER	10	0.17	30.61
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	100	1.73	31.20
CLEANING, WASHING,PICKLING EQUIPMENT OPS,TENDR	20	0.35	46.48
EXTRUDING AND OTHER MACHINE OPERATORS	20	0.35	48.41
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	20	0.35	26.30
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	0.87	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.17	N/A
HAND SEWERS	40	0.69	2.70
HAND CUTTERS AND TRIMMERS	120	2.08	28.06
ASSMBLRS,FABRICTRS,EXC MCH ELCTRC, ELCTRNC	260	4.51	21.33
ALL OTHER HAND WORKERS	70	1.21	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.17	28.28
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.17	23.57
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.35	43.30
CONVEYOR OPERATORS AND TENDERS	10	0.17	45.17
MACHINE FEEDERS AND OFFBEARERS	10	0.17	31.94
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	160	2.77	26.26
HAND PACKERS AND PACKAGERS	120	2.08	26.80
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	440	7.63	16.55
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.17	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HANDBAGS AND PERSONAL LEATHER GOODS
SIC = 317
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1700	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	130	7.65	N/A
FINANCIAL MANAGERS	10	0.59	16.66
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.59	N/A
PURCHASING MANAGERS	10	0.59	17.67
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	1.18	8.31
ADMINISTRATIVE SERVICES MANAGERS	10	0.59	N/A
INDUSTRIAL PRODUCTION MANAGERS	20	1.18	4.99
GENERAL MANAGERS AND TOP EXECUTIVES	40	2.35	8.44
ALL OTHER MANAGERS AND ADMINISTRATORS	20	1.18	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	60	3.53	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.59	22.04
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.59	19.99
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.59	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.59	N/A
COMPUTER PROGRAMMERS	10	0.59	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.59	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.59	N/A
SALES AND RELATED OCCUPATIONS	140	8.24	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	1.18	22.43
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	80	4.71	30.51
SALESPERSONS, RETAIL TRADE	40	2.35	38.01
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	430	25.29	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	1.76	20.78
ADJUSTMENT CLERKS	40	2.35	33.64
SECRETARIES	20	1.18	15.59
FILE CLERKS	10	0.59	21.42
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.59	34.40
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	30	1.76	26.96
PAYROLL AND TIMEKEEPING CLERKS	10	0.59	N/A
BILLING, COST AND RATE CLERKS	10	0.59	34.35
GENERAL OFFICE CLERKS	30	1.76	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	1.18	15.56

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
HANDBAGS AND PERSONAL LEATHER GOODS
SIC = 317
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER OFFICE MACHINE OPERATORS	10	0.59	N/A
SWITCHBOARD OPERATORS	10	0.59	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	1.18	8.31
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.59	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	120	7.06	21.90
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	2.35	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.59	N/A
SERVICE OCCUPATIONS	30	1.76	N/A
GUARDS AND WATCH GUARDS	10	0.59	19.99
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	20	1.18	N/A
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	910	53.53	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.59	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	10	0.59	14.14
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.59	34.40
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	70	4.12	41.32
ALL OTHER MACHINERY MAINTENANCE MECHANICS	10	0.59	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.59	14.14
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.59	N/A
SHOE AND LEATHER WORKERS AND REPAIRERS	100	5.88	9.53
A O PRECISION TEXTILE,APPAREL,FURNISHNGS WORKERS	60	3.53	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	50	2.94	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.59	N/A
TEXTILE DRAW-OUT MACHINE OPERATORS AND TENDERS	20	1.18	N/A
SEWING MACHINE OPERATOR, GARMENT	60	3.53	N/A
SEWING MACHINE OPERATOR, NON-GARMENT	120	7.06	4.09
SHOE SEWING MACHINE OPERATORS AND TENDERS	10	0.59	N/A
CUTTING,SLICING MACHINE SETTERS,SET-UP OPERATORS	20	1.18	22.16
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.59	N/A
CEMENTING AND GLUING MACHINE OPERATORS AND TENDR	30	1.76	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	10	0.59	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	1.18	N/A
HAND SEWERS	10	0.59	N/A
HAND CUTTERS AND TRIMMERS	30	1.76	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	40	2.35	N/A
ALL OTHER HAND WORKERS	10	0.59	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	1.76	10.17
HAND PACKERS AND PACKAGERS	100	5.88	7.40
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	50	2.94	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.59	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10

Stone, Clay, and Glass Products

SIC 32

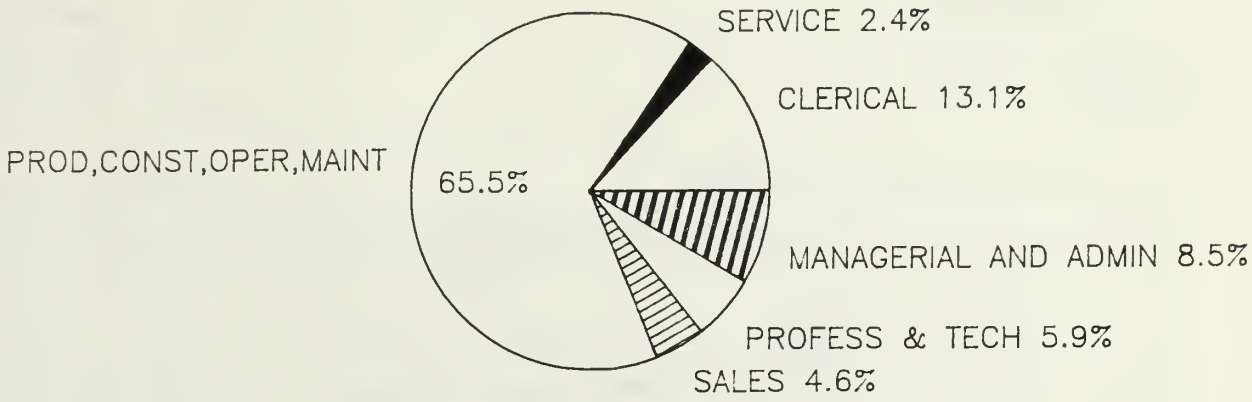
This major group includes establishments engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete, cut stone, and other similar products.

Over 65 percent or 7,100 of the workers in this major group held jobs in the production, operating and maintenance occupational category.The second largest category was clerical and administrative support with 1,420 workers, 13 percent of the total. Five of the 10 largest occupations are in the production and maintenance category.

The largest occupation is heavy truck drivers, 1,100; followed by all other helpers and laborers, 1,020; machine tool cutting operators and tenders, 30; brick masons, 520; and crushing grinding and mixing machine operators and tenders with 410 workers.

STONE, CLAY, AND GLASS PRODUCT (SIC-32)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Truck Drivers, Heavy or Tractor Trailer	1100
2.	All Other Helpers, Laborers, Material Movers	1020
3.	Machine Tool Cutting Operators and Tenders	730
4.	Brick Masons	520
5.	Crushing, Grinding Mixing and Blending Machine Operators & Tenders	410
6.	General Office Clerks	390
7.	General Managers and Top Executives	370
8.	Assemblers, Fabricators, Except Machine Electrical and Electronic	280
9.	First Line Supervisors - Production, Operating Workers	250

OCCUPATIONS OF EMPLOYEES
STONE, CLAY, AND GLASS PRODUCTS
SIC = 32
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	10850	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	920	8.48	N/A
FINANCIAL MANAGERS	30	0.28	6.90
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	120	1.11	N/A
PURCHASING MANAGERS	10	0.09	9.09
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	80	0.74	1.27
ADMINISTRATIVE SERVICES MANAGERS	10	0.09	9.09
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	40	0.37	8.11
INDUSTRIAL PRODUCTION MANAGERS	130	1.20	23.08
GENERAL MANAGERS AND TOP EXECUTIVES	370	3.41	16.53
ALL OTHER MANAGERS AND ADMINISTRATORS	130	1.20	3.91
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	640	5.90	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	70	0.65	19.44
ALL OTHER FINANCIAL SPECIALISTS	30	0.28	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.37	7.89
COST ESTIMATORS	10	0.09	8.33
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	0.55	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.09	N/A
CHEMICAL ENGINEERS	120	1.11	1.64
CIVIL ENGINEERS, INCLUDING TRAFFIC	10	0.09	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	50	0.46	1.92
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.09	N/A
MECHANICAL ENGINEERS	30	0.28	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	10	0.09	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.09	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.09	N/A
DRAFTERS	30	0.28	11.11
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.09	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.09	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.09	21.43
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.09	N/A
COMPUTER PROGRAMMERS	20	0.18	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	90	0.83	N/A
SALES AND RELATED OCCUPATIONS	500	4.61	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	40	0.37	6.82

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
STONE, CLAY, AND GLASS PRODUCTS
SIC = 32
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES ENGINEERS	30	0.28	3.33
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	240	2.21	4.60
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	170	1.57	21.21
ALL OTHER SALES AND RELATED WORKERS	30	0.28	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1420	13.09	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.18	4.35
ADJUSTMENT CLERKS	10	0.09	12.50
SECRETARIES	210	1.94	23.11
RECEPTIONISTS AND INFORMATION CLERKS	20	0.18	5.00
TYPISTS	110	1.01	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.18	N/A
FILE CLERKS	20	0.18	5.00
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	60	0.55	1.69
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	240	2.21	13.39
PAYROLL AND TIMEKEEPING CLERKS	50	0.46	5.66
BILLING, COST AND RATE CLERKS	20	0.18	12.50
GENERAL OFFICE CLERKS	390	3.59	12.21
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.18	42.86
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.18	N/A
ALL OTHER OFFICE MACHINE OPERATORS	10	0.09	N/A
SWITCHBOARD OPERATORS	20	0.18	N/A
DISPATCHERS - EXCEPT POLICE, FIRE AND AMBULANCE	60	0.55	17.46
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.18	31.58
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.18	5.00
TRAFFIC, SHIPPING AND RECEIVING CLERKS	80	0.74	19.75
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.09	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.09	N/A
SERVICE OCCUPATIONS	260	2.40	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	150	1.38	3.40
GUARDS AND WATCH GUARDS	40	0.37	7.32
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	70	0.65	45.71
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	7100	65.44	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRES	10	0.09	7.69
MANAGER/SUPERS,CONSTR TRADES & EXTRACTIVE WORKERS	10	0.09	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
STONE, CLAY, AND GLASS PRODUCTS
SIC = 32
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	250	2.30	18.78
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.09	28.57
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.28	4.00
PRECISION INSPECTORS, TESTERS AND GRADERS	10	0.09	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	120	1.11	13.04
MACHINERY MAINTENANCE MECHANICS	140	1.29	13.87
MILLWRIGHTS	10	0.09	N/A
MACHINERY MAINTENANCE WORKERS	40	0.37	2.56
MAINTENANCE REPAIRERS, GENERAL UTILITY	60	0.55	11.48
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	140	1.29	23.91
MOBILE HEAVY EQUIPMENT MECHANICS, EXCEPT ENGINES	10	0.09	38.46
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	40	0.37	N/A
CARPENTERS	40	0.37	34.88
ELECTRICIANS	20	0.18	4.35
BRICK MASONS	520	4.79	N/A
CONCRETE AND TERRAZZO FINISHERS	20	0.18	29.41
PAINTERS, PAPERHANGERS, CONSTRUCTION, MAINTENANC	10	0.09	20.00
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.09	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.18	N/A
TOOL AND DIE MAKERS	10	0.09	22.22
MACHINISTS	70	0.65	40.58
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	10	0.09	N/A
SHEET METAL WORKERS	10	0.09	N/A
ALL OTHER PRECISION METAL WORKERS	110	1.01	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	50	0.46	19.61
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	40	0.37	12.50
MACHINE TOOL CUTTING OPERATORS AND TENDERS	730	6.73	0.68
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	40	0.37	13.16
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	170	1.57	22.75
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	60	0.55	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	30	0.28	N/A
EXTRUDING, FORMING MACHINE OPS, TNDRS, SYNTHETIC	30	0.28	48.28
FURNACE, KILN, ETC OPERATORS	70	0.65	21.92
CUTTING,SLICING MACHINE SETTERS,SET-UP OPERATORS	20	0.18	11.11
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.09	18.18
SEPARTNG, FILTRNG, CLARFYNG, PRECIPTTNG, STILL	60	0.55	39.34
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	410	3.78	31.46
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	60	0.55	38.33
EXTRUDING AND OTHER MACHINE OPERATORS	60	0.55	40.00
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	110	1.01	2.73
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	50	0.46	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
STONE, CLAY, AND GLASS PRODUCTS
SIC = 32
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER MACHINE OPERATORS AND TENDERS	130	1.20	N/A
WELDERS AND CUTTERS	40	0.37	39.47
HAND CUTTERS AND TRIMMERS	20	0.18	13.04
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	280	2.58	27.50
ALL OTHER HAND WORKERS	220	2.03	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.09	21.43
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	1100	10.14	14.34
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.09	28.57
GRADER, DOZER AND SCRAPER OPERATORS	20	0.18	13.33
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	150	1.38	34.90
CONVEYOR OPERATORS AND TENDERS	10	0.09	44.44
OPERATING ENGINEERS	40	0.37	27.78
MECHANIC AND REPAIRER HELPERS	230	2.12	4.29
MACHINE FEEDERS AND OFFBEARERS	40	0.37	5.71
HAND PACKERS AND PACKAGERS	50	0.46	34.04
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	1020	9.40	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	60	0.55	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CONCRETE, GYPSUM AND PLASTER PRODUCTS
SIC = 327
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3520	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	210	5.97	N/A
FINANCIAL MANAGERS	10	0.28	15.74
PURCHASING MANAGERS	10	0.28	23.57
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.28	28.28
ADMINISTRATIVE SERVICES MANAGERS	10	0.28	11.11
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.28	27.21
INDUSTRIAL PRODUCTION MANAGERS	20	0.57	29.75
GENERAL MANAGERS AND TOP EXECUTIVES	130	3.69	21.44
ALL OTHER MANAGERS AND ADMINISTRATORS	20	0.57	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	100	2.84	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.85	39.78
ALL OTHER FINANCIAL SPECIALISTS	10	0.28	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.28	19.99
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.28	N/A
CHEMICAL ENGINEERS	10	0.28	24.74
MECHANICAL ENGINEERS	10	0.28	N/A
ALL OTHER ENGINEERS	10	0.28	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	10	0.28	N/A
DRAFTERS	20	0.57	17.32
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.28	22.26
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	N/A	N/A
SALES AND RELATED OCCUPATIONS	80	2.27	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.28	24.84
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.28	44.85
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	50	1.42	19.68
ALL OTHER SALES AND RELATED WORKERS	10	0.28	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	330	9.38	N/A
SECRETARIES	50	1.42	48.54
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.28	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	80	2.27	22.25
PAYROLL AND TIMEKEEPING CLERKS	10	0.28	14.14
BILLING, COST AND RATE CLERKS	10	0.28	12.49

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CONCRETE, GYPSUM AND PLASTER PRODUCTS
SIC = 327
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
GENERAL OFFICE CLERKS	60	1.70	40.08
ALL OTHER OFFICE MACHINE OPERATORS	10	0.28	N/A
DISPATCHERS - EXCEPT POLICE, FIRE AND AMBULANCE	60	1.70	18.53
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.28	46.15
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.28	N/A
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.28	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.57	N/A
SERVICE OCCUPATIONS	40	1.14	N/A
ALL OTHER SERVICE SUPERVISORS	10	0.28	N/A
GUARDS AND WATCH GUARDS	20	0.57	5.26
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	20	0.57	40.42
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2760	78.41	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.28	23.57
MANAGER/SUPERS, CONSTR TRADES & EXTRACTIVE WORKR	10	0.28	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	120	3.41	21.11
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.28	40.82
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.85	3.99
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	30	0.85	37.45
MACHINERY MAINTENANCE MECHANICS	60	1.70	20.40
MACHINERY MAINTENANCE WORKERS	20	0.57	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.28	10.87
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	140	3.98	23.76
MOBILE HEAVY EQUIPMENT MECHANICS, EXCEPT ENGINES	10	0.28	42.49
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	20	0.57	N/A
CARPENTERS	40	1.14	40.15
ELECTRICIANS	10	0.28	11.78
CONCRETE AND TERRAZZO FINISHERS	20	0.57	28.21
ALL OTHER CONSTRUCTION TRADES WORKERS	10	0.28	N/A
ALL OTHER PRECISION METAL WORKERS	50	1.42	N/A
FURNACE, KILN, ETC OPERATORS	20	0.57	38.68
SEPARTNG, FILTRNG, CLARFYNG, PRECIPTTNG, STILL	20	0.57	26.80
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	190	5.40	43.37
EXTRDG, FRMG, PRSSG, COMPCTG MCH STTRS, SET-UP	60	1.70	39.05
ALL OTHER HAND WORKERS	90	2.56	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.28	41.45
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	950	26.99	13.75
GRADER, DOZER AND SCRAPER OPERATORS	20	0.57	11.54

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CONCRETE, GYPSUM AND PLASTER PRODUCTS
SIC = 327
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	110	3.13	44.71
CONVEYOR OPERATORS AND TENDERS	10	0.28	45.81
OPERATING ENGINEERS	40	1.14	28.85
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	60	1.70	N/A
MECHANIC AND REPAIRER HELPERS	30	0.85	37.40
MACHINE FEEDERS AND OFFBEARERS	30	0.85	9.07
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	60	1.70	N/A
HAND PACKERS AND PACKAGERS	20	0.57	26.67
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	460	13.07	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.28	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS
SIC = 329
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5580	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	560	10.04	N/A
FINANCIAL MANAGERS	20	0.36	N/A
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	120	2.15	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	70	1.25	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.54	3.99
INDUSTRIAL PRODUCTION MANAGERS	70	1.25	12.25
GENERAL MANAGERS AND TOP EXECUTIVES	140	2.51	10.91
ALL OTHER MANAGERS AND ADMINISTRATORS	120	2.15	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	500	8.96	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.54	N/A
ALL OTHER FINANCIAL SPECIALISTS	30	0.54	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	0.54	N/A
COST ESTIMATORS	10	0.18	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	50	0.90	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.18	N/A
CHEMICAL ENGINEERS	120	2.15	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	50	0.90	1.92
MECHANICAL ENGINEERS	30	0.54	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.18	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.18	N/A
DRAFTERS	10	0.18	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.18	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.18	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.18	N/A
COMPUTER PROGRAMMERS	20	0.36	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	80	1.43	N/A
SALES AND RELATED OCCUPATIONS	400	7.17	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.54	3.22
SALES ENGINEERS	30	0.54	3.33
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	220	3.94	1.62
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	100	1.79	17.02
ALL OTHER SALES AND RELATED WORKERS	20	0.36	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	940	16.85	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS
SIC = 329
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.18	N/A
ADJUSTMENT CLERKS	10	0.18	12.49
SECRETARIES	110	1.97	2.10
RECEPTIONISTS AND INFORMATION CLERKS	20	0.36	N/A
TYPISTS	110	1.97	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.36	N/A
FILE CLERKS	20	0.36	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	60	1.08	1.75
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	130	2.33	5.06
PAYROLL AND TIMEKEEPING CLERKS	40	0.72	N/A
BILLING, COST AND RATE CLERKS	10	0.18	14.28
GENERAL OFFICE CLERKS	310	5.56	4.16
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.18	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.18	N/A
SWITCHBOARD OPERATORS	10	0.18	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.18	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.18	19.99
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	1.25	23.48
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.18	N/A
SERVICE OCCUPATIONS	190	3.41	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	140	2.51	N/A
GUARDS AND WATCH GUARDS	20	0.36	11.13
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	30	0.54	22.62
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2990	53.58	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	50	0.90	20.20
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	30	0.54	8.16
MACHINERY MAINTENANCE MECHANICS	60	1.08	9.50
MILLWRIGHTS	10	0.18	N/A
MACHINERY MAINTENANCE WORKERS	20	0.36	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.54	10.18
CARPENTERS	10	0.18	14.28
ELECTRICIANS	10	0.18	N/A
BRICK MASONS	500	8.96	N/A
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.18	19.99
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.18	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS
SIC = 329
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOOL AND DIE MAKERS	10	0.18	24.74
MACHINISTS	60	1.08	45.91
SHEET METAL WORKERS	10	0.18	N/A
PRECISION MLDRS, SHPRS, CSTRS, CRVRS, EXC JEWELR	20	0.36	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	50	0.90	19.99
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	40	0.72	12.99
MACHINE TOOL CUTTING OPERATORS AND TENDERS	730	13.08	0.62
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	40	0.72	13.67
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	170	3.05	22.62
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	60	1.08	N/A
EXTRUDING, FORMING MACHINE OPS, TNDRS, SYNTHETIC	30	0.54	47.90
FURNACE, KILN, ETC OPERATORS	30	0.54	24.84
CUTTING,SLICING MACHINE SETTERS,SET-UP OPERATORS	10	0.18	22.26
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	10	0.18	28.86
SEPARTNG, FILTRNG, CLARFYNG, PRECIPTTNG, STILL	40	0.72	48.30
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	30	0.54	26.87
EXTRUDING AND OTHER MACHINE OPERATORS	40	0.72	34.50
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.18	31.42
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.36	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	120	2.15	N/A
HAND CUTTERS AND TRIMMERS	10	0.18	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	80	1.43	26.48
ALL OTHER HAND WORKERS	10	0.18	N/A
ALL OTHER MOTOR VEHICLE OPERATORS	20	0.36	N/A
MECHANIC AND REPAIRER HELPERS	200	3.58	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	430	7.71	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	0.36	N/A

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N/A - NOT AVAILABLE

Primary Metal Industries

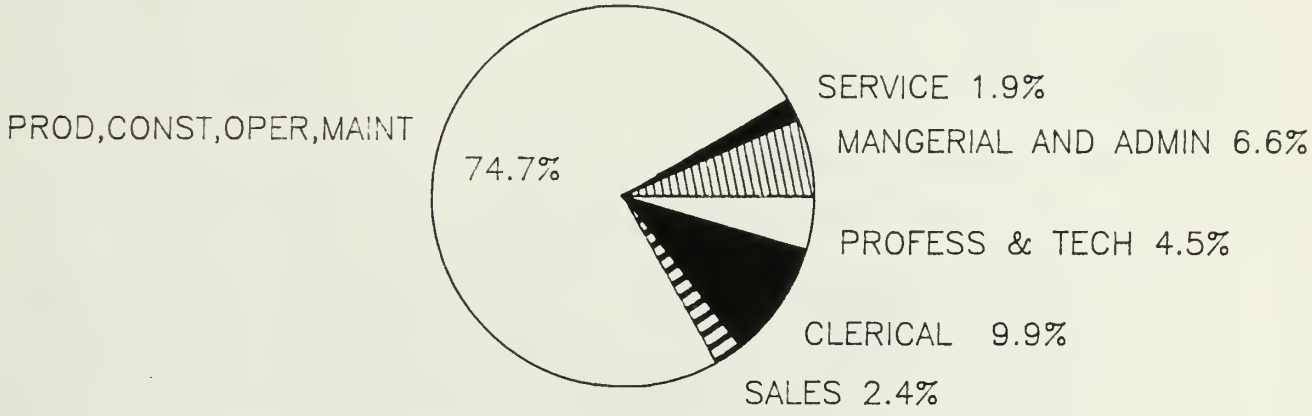
SIC 33

This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; in the manufacture of castings and other other basic products of ferrous and nonferrous metals; and in the manufacture of nails, spikes and insulated wire and cable.

The main occupational group of primary metal workers is maintenance and production with 10,500 or 74.7 percent of all workers in the primary metal industry. Of the ten largest occupations, the top nine are in maintenance and production with the tenth ranked being general managers and top executives. Extruding and drawing machine setters and set-up operators had the highest employment with 1,230 people, followed by 810, all other machine operators and tenders and 760, assemblers and fabricators except electric.

PRIMARY METAL INDUSTRY (SIC-33)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Extruding, Drawing Machine Setters, Metal and Plastic	1230
2.	All Other Metal & Plastic Machine Operators and Tender	810
3.	Assemblers, Fabricators, Except Machine Electrical, Electronic	760
4.	All Other Machine Operators and Tenders	670
5.	All Other Helpers Laborers, Material Movers	640
6.	Machine Forming Operators & Tenders, Metal and Plastic	590
7.	First Line Supervisors - Production, Operating Workers	580
8.	All Other Hand Workers	540
9.	Machinists	460
10.	General Managers and Top Executives	380

OCCUPATIONS OF EMPLOYEES
PRIMARY METAL INDUSTRIES
SIC = 33
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	14050	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	930	6.62	N/A
FINANCIAL MANAGERS	130	0.93	35.07
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	40	0.28	7.50
PURCHASING MANAGERS	40	0.28	14.29
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	60	0.43	30.36
ADMINISTRATIVE SERVICES MANAGERS	40	0.28	44.44
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	50	0.36	20.83
INDUSTRIAL PRODUCTION MANAGERS	140	1.00	17.52
GENERAL MANAGERS AND TOP EXECUTIVES	380	2.70	17.29
ALL OTHER MANAGERS AND ADMINISTRATORS	70	0.50	15.71
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	630	4.48	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	50	0.36	10.64
BUDGET ANALYSTS	10	0.07	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.07	23.08
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.28	29.73
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.07	14.29
COST ESTIMATORS	40	0.28	30.95
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	0.28	37.84
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	50	0.36	18.52
ELECTRICAL AND ELECTRONIC ENGINEERS	30	0.21	34.48
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	40	0.28	27.50
SAFETY ENGINEERS, EXCEPT MINING	10	0.07	11.11
MECHANICAL ENGINEERS	30	0.21	24.24
ALL OTHER ENGINEERS	50	0.36	6.67
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.07	35.71
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.14	18.75
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.07	40.00
DRAFTERS	50	0.36	36.54
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	20	0.14	43.75
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.07	30.77
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	50	0.36	32.08
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.07	16.67
COMPUTER PROGRAMMERS	10	0.07	7.69
COMPUTER PROGRAMMER AIDES	10	0.07	14.29
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.07	7.69
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.07	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRIMARY METAL INDUSTRIES
SIC = 33
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES AND RELATED OCCUPATIONS	340	2.42	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	100	0.71	35.79
SALES ENGINEERS	20	0.14	31.25
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	120	0.85	20.97
ALL OTHER SALES AND RELATED WORKERS	100	0.71	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1390	9.89	N/A
ADJUSTMENT CLERKS	30	0.21	19.23
SECRETARIES	180	1.28	19.13
STENOGRAPHERS	10	0.07	28.57
RECEPTIONISTS AND INFORMATION CLERKS	40	0.28	37.14
TYPISTS	50	0.36	36.54
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.07	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.14	5.00
FILE CLERKS	10	0.07	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	0.21	29.03
PROCUREMENT CLERKS	20	0.14	11.76
STATISTICAL CLERKS	10	0.07	22.22
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	240	1.71	34.32
PAYROLL AND TIMEKEEPING CLERKS	50	0.36	18.75
BILLING, COST AND RATE CLERKS	30	0.21	25.00
GENERAL OFFICE CLERKS	120	0.85	20.97
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.14	33.33
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.14	23.53
SWITCHBOARD OPERATORS	30	0.21	16.13
PRODUCTION, PLANNING AND EXPEDITING CLERKS	80	0.57	14.46
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	70	0.50	19.18
TRAFFIC, SHIPPING AND RECEIVING CLERKS	230	1.64	19.57
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	50	0.36	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	70	0.50	N/A
SERVICE OCCUPATIONS	270	1.92	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	40	0.28	45.45
GUARDS AND WATCH GUARDS	90	0.64	25.58
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	130	0.93	14.84
ALL OTHER SERVICE WORKERS	10	0.07	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRIMARY METAL INDUSTRIES
SIC = 33
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	10500	74.73	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	60	0.43	24.56
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	580	4.13	12.44
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.14	12.50
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	40	0.28	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	90	0.64	21.84
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	360	2.56	31.28
MACHINERY MAINTENANCE MECHANICS	270	1.92	13.96
MILLWRIGHTS	50	0.36	28.26
REFRACTORY MATERIALS REPAIRERS, EXC BRICK MASONS	10	0.07	42.86
MAINTENANCE REPAIRERS, GENERAL UTILITY	170	1.21	21.51
AUTOMOTIVE MECHANICS	10	0.07	20.00
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	10	0.07	40.00
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	50	0.36	N/A
ELECTRICIANS	70	0.50	14.71
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	20	0.14	35.29
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	60	0.43	N/A
TOOL AND DIE MAKERS	60	0.43	25.40
MACHINISTS	460	3.27	23.85
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	80	0.57	48.05
PATTERN AND MODEL MAKERS, WOOD	50	0.36	46.94
PRECISION LAYOUT WORKERS, METAL	10	0.07	28.57
SHEET METAL WORKERS	90	0.64	40.70
ALL OTHER PRECISION METAL WORKERS	10	0.07	18.18
PATTERN AND MODEL MAKERS, WOOD	30	0.21	48.00
PRECISION FOUNDRY MOLD AND CORE MAKERS	230	1.64	23.01
ALL OTHER PRECISION METAL WORKERS	10	0.07	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	30	0.21	43.33
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	130	0.93	21.80
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	70	0.50	19.18
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	1230	8.75	22.85
ROLLING MACHINE SETTERS, METAL AND PLASTIC	90	0.64	30.11
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	590	4.20	45.87
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	70	0.50	29.23
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	20	0.14	34.78
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	80	0.57	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PRIMARY METAL INDUSTRIES
SIC = 33
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	70	0.50	43.24
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	260	1.85	43.36
FOUNDRY MOLD ASSEMBLY WORKERS	70	0.50	36.62
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	30	0.21	44.44
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	170	1.21	34.10
FURNACE OPERATORS AND TENDERS	170	1.21	38.95
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	180	1.28	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	810	5.77	N/A
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.07	25.00
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	30	0.21	36.67
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	30	0.21	20.00
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	70	0.50	47.22
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	60	0.43	43.55
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	120	0.85	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	670	4.77	N/A
GRINDING AND POLISHING WORKERS, HAND	80	0.57	33.77
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	760	5.41	39.76
ALL OTHER HAND WORKERS	540	3.84	N/A
STATIONARY ENGINEERS	10	0.07	40.00
ALL OTHER PLANT AND SYSTEMS OPERATORS	10	0.07	37.50
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	110	0.78	49.07
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	40	0.28	31.71
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.07	N/A
GRADER, DOZER AND SCRAPER OPERATORS	40	0.28	48.78
CRANE AND TOWER OPERATORS	20	0.14	46.67
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	90	0.64	20.22
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.14	N/A
MECHANIC AND REPAIRER HELPERS	20	0.14	20.83
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	100	0.71	28.43
HAND PACKERS AND PACKAGERS	120	0.85	44.63
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	640	4.56	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BLAST FURNACE AND BASIC STEEL PRODUCTS
SIC = 331
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1780	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	140	7.87	N/A
FINANCIAL MANAGERS	20	1.12	23.09
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.56	N/A
PURCHASING MANAGERS	10	0.56	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.56	N/A
INDUSTRIAL PRODUCTION MANAGERS	10	0.56	18.89
GENERAL MANAGERS AND TOP EXECUTIVES	70	3.93	30.52
ALL OTHER MANAGERS AND ADMINISTRATORS	20	1.12	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	90	5.06	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.56	8.33
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.56	38.49
COST ESTIMATORS	10	0.56	33.07
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.56	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.56	N/A
ALL OTHER ENGINEERS	10	0.56	N/A
DRAFTERS	10	0.56	37.79
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.56	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.56	19.99
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.56	N/A
COMPUTER PROGRAMMERS	10	0.56	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.56	N/A
SALES AND RELATED OCCUPATIONS	70	3.93	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.56	28.78
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	30	1.69	37.73
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	30	1.69	22.61
ALL OTHER SALES AND RELATED WORKERS	10	0.56	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	240	13.48	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.56	32.77
SECRETARIES	40	2.25	16.65
RECEPTIONISTS AND INFORMATION CLERKS	10	0.56	33.33
TYPISTS	10	0.56	14.28
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.56	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BLAST FURNACE AND BASIC STEEL PRODUCTS
SIC = 331
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.56	21.65
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	2.25	8.33
PAYROLL AND TIMEKEEPING CLERKS	10	0.56	16.66
BILLING, COST AND RATE CLERKS	10	0.56	N/A
GENERAL OFFICE CLERKS	20	1.12	15.81
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.56	14.28
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.56	16.66
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	1.12	6.66
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.56	12.85
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	2.25	13.40
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.56	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.56	N/A
SERVICE OCCUPATIONS	10	0.56	N/A
GUARDS AND WATCH GUARDS	10	0.56	37.79
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1220	68.54	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	80	4.49	9.27
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.56	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	20	1.12	18.74
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	30	1.69	34.31
MACHINERY MAINTENANCE MECHANICS	40	2.25	13.78
MILLWRIGHTS	20	1.12	21.29
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.56	28.86
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.56	N/A
ELECTRICIANS	10	0.56	17.67
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.56	N/A
TOOL AND DIE MAKERS	30	1.69	32.63
MACHINISTS	140	7.87	35.95
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	20	1.12	37.48
ALL OTHER PRECISION METAL WORKERS	10	0.56	N/A
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	10	0.56	N/A
MACHINE TOOL CUTTING OPERATORS AND TENDERS	20	1.12	38.41
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	30	1.69	47.95
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	60	3.37	13.79
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	140	7.87	19.10
ROLLING MACHINE SETTERS, METAL AND PLASTIC	70	3.93	18.05
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	20	1.12	38.40

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
BLAST FURNACE AND BASIC STEEL PRODUCTS
SIC = 331
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	20	1.12	31.45
FURNACE OPERATORS AND TENDERS	40	2.25	25.15
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	50	2.81	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	70	3.93	N/A
BOILER OPERATORS AND TENDERS, LOW PRESSURE	10	0.56	44.72
COATING, PAINTING, SPRAYING MCH OPERATORS,TENDR	10	0.56	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS,TENDR	10	0.56	19.99
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.56	30.30
GRINDING AND POLISHING WORKERS, HAND	10	0.56	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	30	1.69	40.03
ALL OTHER HAND WORKERS	40	2.25	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	10	0.56	37.50
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.56	39.76
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.56	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	1.69	10.90
MACHINE FEEDERS AND OFFBEARERS	40	2.25	36.57
HAND PACKERS AND PACKAGERS	10	0.56	44.72
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	30	1.69	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
IRON AND STEEL FOUNDRIES
SIC = 332
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1550	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	100	6.45	N/A
FINANCIAL MANAGERS	10	0.65	14.28
PURCHASING MANAGERS	10	0.65	16.66
INDUSTRIAL PRODUCTION MANAGERS	20	1.29	5.88
GENERAL MANAGERS AND TOP EXECUTIVES	50	3.23	9.43
ALL OTHER MANAGERS AND ADMINISTRATORS	20	1.29	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	60	3.87	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	1.29	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.65	N/A
ALL OTHER ENGINEERS	10	0.65	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.65	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.65	N/A
SALES AND RELATED OCCUPATIONS	40	2.58	N/A
SALES ENGINEERS	10	0.65	47.38
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	1.29	49.37
ALL OTHER SALES AND RELATED WORKERS	10	0.65	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	160	10.32	N/A
SECRETARIES	10	0.65	15.97
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	30	1.94	7.99
PAYROLL AND TIMEKEEPING CLERKS	10	0.65	16.66
GENERAL OFFICE CLERKS	20	1.29	27.35
TRAFFIC, SHIPPING AND RECEIVING CLERKS	60	3.87	27.43
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	1.94	N/A
SERVICE OCCUPATIONS	30	1.94	N/A
ALL OTHER SERVICE SUPERVISORS	20	1.29	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	10	0.65	31.94
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1160	74.84	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	1.29	38.31

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
IRON AND STEEL FOUNDRIES
SIC = 332
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	50	3.23	17.76
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	10	0.65	48.98
MACHINERY MAINTENANCE MECHANICS	40	2.58	11.44
REFRACTORY MATERIALS REPAIRERS, EXC BRICK MASONS	10	0.65	49.48
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	1.29	20.37
ELECTRICIANS	10	0.65	28.28
MACHINISTS	40	2.58	39.44
PATTERN AND MODEL MAKERS, WOOD	20	1.29	39.36
ALL OTHER PRECISION METAL WORKERS	50	3.23	N/A
PATTERN AND MODEL MAKERS, WOOD	10	0.65	19.99
PRECISION FOUNDRY MOLD AND CORE MAKERS	120	7.74	22.64
GRINDNG,LAPPNG,BUFFNG MCH TOOL STTRS,SET-UP	40	2.58	28.78
MACHINE TOOL CUTTING OPERATORS AND TENDERS	20	1.29	44.72
MET MOLDNG,COREMKNG,CASTNG MCH STTRS, SET-UP	40	2.58	48.04
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	80	5.16	34.43
FOUNDRY MOLD ASSEMBLY WORKERS	30	1.94	28.05
FURNACE OPERATORS AND TENDERS	10	0.65	22.26
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	20	1.29	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.65	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	10	0.65	40.82
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	1.94	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	270	17.42	N/A
WELDERS AND CUTTERS	10	0.65	34.64
GRINDING AND POLISHING WORKERS, HAND	30	1.94	30.60
ALL OTHER HAND WORKERS	40	2.58	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	1.29	27.24
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.65	34.64
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.65	39.62
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	50	3.23	20.73
HAND PACKERS AND PACKAGERS	20	1.29	46.35
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	40	2.58	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	1.29	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
NONFERROUS ROLLING AND DRAWING
SIC = 335
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	7110	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	380	5.34	N/A
FINANCIAL MANAGERS	50	0.70	6.52
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.28	11.11
PURCHASING MANAGERS	20	0.28	11.11
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	40	0.56	35.59
ADMINISTRATIVE SERVICES MANAGERS	10	0.14	28.86
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.42	21.85
INDUSTRIAL PRODUCTION MANAGERS	80	1.13	19.22
GENERAL MANAGERS AND TOP EXECUTIVES	100	1.41	15.51
ALL OTHER MANAGERS AND ADMINISTRATORS	40	0.56	15.90
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	280	3.94	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.42	16.56
ALL OTHER FINANCIAL SPECIALISTS	10	0.14	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.14	13.32
PERSONNEL,TRAINING,LABOR RELATIONS SPEC	10	0.14	17.67
COST ESTIMATORS	20	0.28	25.49
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.14	14.43
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.14	24.32
ELECTRICAL AND ELECTRONIC ENGINEERS	20	0.28	34.78
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.28	13.22
SAFETY ENGINEERS, EXCEPT MINING	10	0.14	19.99
MECHANICAL ENGINEERS	10	0.14	17.49
ALL OTHER ENGINEERS	10	0.14	31.62
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.14	48.10
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.28	21.08
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.14	48.98
DRAFTERS	20	0.28	21.29
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.14	32.77
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.14	24.74
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	20	0.28	9.99
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.14	N/A
SALES AND RELATED OCCUPATIONS	180	2.53	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	50	0.70	30.90
SALES ENGINEERS	10	0.14	24.74

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
NONFERROUS ROLLING AND DRAWING
SIC = 335
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	90	1.27	16.38
ALL OTHER SALES AND RELATED WORKERS	30	0.42	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	610	8.58	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.28	25.35
ADJUSTMENT CLERKS	20	0.28	17.56
SECRETARIES	60	0.84	17.46
STENOGRAPHERS	10	0.14	28.57
RECEPTIONISTS AND INFORMATION CLERKS	10	0.14	24.32
TYPISTS	20	0.28	21.20
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.28	9.42
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.14	20.20
PROCUREMENT CLERKS	10	0.14	13.32
STATISTICAL CLERKS	10	0.14	21.65
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	60	0.84	19.11
PAYROLL AND TIMEKEEPING CLERKS	20	0.28	23.41
BILLING, COST AND RATE CLERKS	20	0.28	33.27
GENERAL OFFICE CLERKS	50	0.70	18.18
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.14	44.09
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.14	19.24
SWITCHBOARD OPERATORS	20	0.28	12.42
PRODUCTION, PLANNING AND EXPEDITING CLERKS	50	0.70	11.78
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	50	0.70	16.79
TRAFFIC, SHIPPING AND RECEIVING CLERKS	100	1.41	20.17
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	30	0.42	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.14	N/A
SERVICE OCCUPATIONS	160	2.25	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	30	0.42	24.28
GUARDS AND WATCH GUARDS	50	0.70	19.98
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	80	1.13	11.61
ALL OTHER SERVICE WORKERS	10	0.14	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5500	77.36	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	30	0.42	15.30
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	290	4.08	11.36
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.14	15.97
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	20	0.28	44.79

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
NONFERROUS ROLLING AND DRAWING
SIC = 335
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRECISION INSPECTORS, TESTERS AND GRADERS	60	0.84	22.70
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	240	3.38	32.76
MACHINERY MAINTENANCE MECHANICS	150	2.11	11.00
MILLWRIGHTS	20	0.28	27.95
MACHINERY MAINTENANCE WORKERS	30	0.42	46.63
MAINTENANCE REPAIRERS, GENERAL UTILITY	80	1.13	9.93
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	10	0.14	48.98
ELECTRICIANS	50	0.70	14.93
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.14	36.05
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	30	0.42	N/A
TOOL AND DIE MAKERS	20	0.28	20.75
MACHINISTS	40	0.56	31.61
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	10	0.14	20.20
ALL OTHER PRECISION METAL WORKERS	20	0.28	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.14	N/A
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	1070	15.05	23.65
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	340	4.78	44.70
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	20	0.28	18.70
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	120	1.69	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	520	7.31	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	20	0.28	23.09
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	40	0.56	47.79
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	50	0.70	47.24
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	100	1.41	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	420	5.91	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	690	9.70	37.05
ALL OTHER HAND WORKERS	360	5.06	N/A
STATIONARY ENGINEERS	10	0.14	48.98
ALL OTHER MOTOR VEHICLE OPERATORS	70	0.98	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	40	0.56	17.08
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	30	0.42	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	0.42	37.52
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	480	6.75	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PRIMARY METAL PRODUCTS
SIC = 339
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1190	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	100	8.40	N/A
FINANCIAL MANAGERS	30	2.52	31.97
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.84	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.84	N/A
INDUSTRIAL PRODUCTION MANAGERS	20	1.68	8.83
GENERAL MANAGERS AND TOP EXECUTIVES	40	3.36	14.56
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.84	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	120	10.08	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.84	N/A
COST ESTIMATORS	10	0.84	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.84	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	30	2.52	18.33
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.84	17.67
ALL OTHER ENGINEERS	50	4.20	N/A
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.84	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.84	N/A
SALES AND RELATED OCCUPATIONS	30	2.52	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	1.68	42.37
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.84	42.85
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	130	10.92	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.84	24.74
SECRETARIES	30	2.52	20.32
TYPISTS	10	0.84	28.57
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	1.68	18.97
PAYROLL AND TIMEKEEPING CLERKS	10	0.84	23.57
GENERAL OFFICE CLERKS	10	0.84	12.37
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.84	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	20	1.68	15.79
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.68	N/A
SERVICE OCCUPATIONS	30	2.52	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PRIMARY METAL PRODUCTS
SIC = 339
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
GUARDS AND WATCH GUARDS	10	0.84	N/A
JANITORS & CLEANERS, EXCEPT MAIDS & HOUSE CLEANE	20	1.68	11.11
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	780	65.55	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	40	3.36	7.89
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.84	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	30	2.52	6.89
MACHINERY MAINTENANCE MECHANICS	20	1.68	11.02
MACHINERY MAINTENANCE WORKERS	10	0.84	46.77
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	1.68	6.42
A O CONSTRUCTION,EXTRACTIVE WORKERS,EXC HELPER	10	0.84	N/A
MACHINISTS	20	1.68	7.87
SHEET METAL WORKERS	60	5.04	24.41
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	10	0.84	N/A
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	80	6.72	27.07
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	50	4.20	N/A
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	10	0.84	N/A
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	80	6.72	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	130	10.92	36.53
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	20	1.68	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	60	5.04	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	20	1.68	N/A
SOLDERERS AND BRAZERS	30	2.52	46.94
ALL OTHER HAND WORKERS	10	0.84	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	20	1.68	25.64
ALL OTHER MOTOR VEHICLE OPERATORS	20	1.68	N/A
MECHANIC AND REPAIRER HELPERS	10	0.84	N/A
HAND PACKERS AND PACKAGERS	20	1.68	35.60
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.84	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.84	N/A

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N/A - NOT AVAILABLE

Fabricated Metals

SIC 34

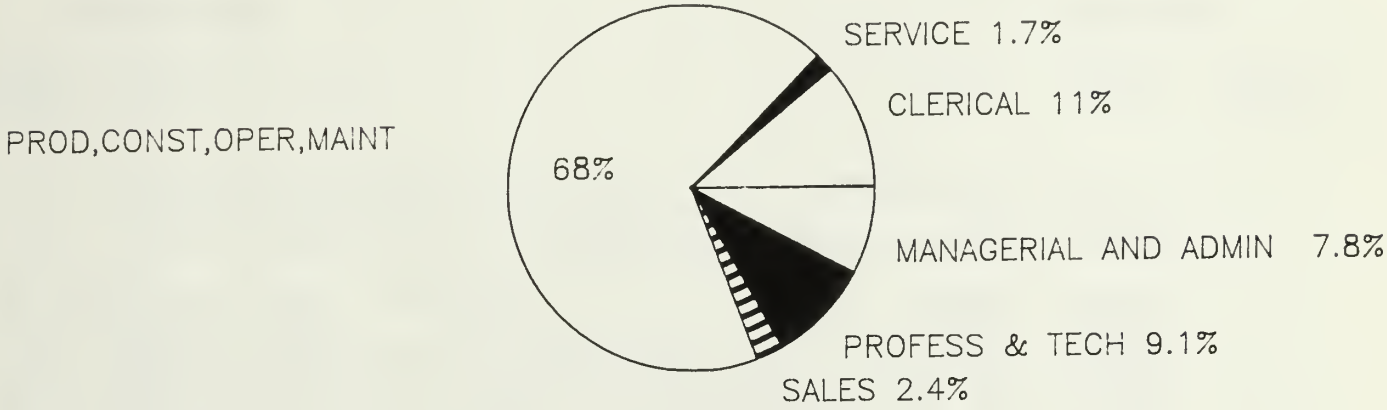
This major group includes establishments engaged in fabricating ferrous and nonferrous metal products such as metal cans, tinware, hand tools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal forgings, metal stampings, ordnance (except vehicles and guided missiles), and a variety of metal and wire products not elsewhere classified.

Employment in the major group has continued to decline since the 1983 survey by 3,300 jobs or 7.2 percent, going from 46,100 in 1983 to 42,800 in 1986. The decline in employment appears to be slowing, however, as the job loss was 7,300 or 13.7 percent over the 1980 to 1983 survey period.

Jobs in the production, construction and maintenance occupational category represent 68 percent of total industry employment, ranging from a high of 74.1 percent in SIC 347 (metal services, nec) to a low of 48.4 percent in SIC 343 (plumbing, and heating, except electric). Although small in size, the occupational staffing pattern of the plumbing and heating industry differs markedly from other industries in the fabricated metal products grouping in the greater percentage of jobs in the professional and technical category as well as in the managerial and sales areas.

Within the production, construction and maintenance category, 2,160 job holders are assemblers and fabricators, 1,850 are production supervisors, 1,600 are machine tool operators, 1,580 are sheet metal workers, 1,290 are machinists and 1,230 are machine forming operators. These six occupations account for 9,710 jobs or approximately 33 percent of the total production and maintenance category.

FABRICATED METALS PRODUCTS (SIC-34)
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Assemblers, Fabricators, Except Machine Electrical, Electronic	2160
2.	First Line Supervisors - Production, Operating Workers	1850
3.	Machine Tool Cutting Operators and Tenders	1600
4.	Sheet Metal Workers	1580
5.	Machinists	1290
6.	Machine Forming Operators & Tenders Metal and Plastic	1230
7.	General Managers and Top Executives	1210
8.	All Other Helpers, Laborers, Material Movers	1210
9.	Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers	1190
10.	Metal Fabricators, Structural Metal Products	1010

OCCUPATIONS OF EMPLOYEES
FABRICATED METAL PRODUCTS
SIC = 34
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	42890	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	3350	7.81	N/A
FINANCIAL MANAGERS	590	1.38	19.15
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	110	0.26	11.82
PURCHASING MANAGERS	160	0.37	17.31
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	290	0.68	22.57
ADMINISTRATIVE SERVICES MANAGERS	80	0.19	15.48
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	210	0.49	13.15
INDUSTRIAL PRODUCTION MANAGERS	510	1.19	17.22
GENERAL MANAGERS AND TOP EXECUTIVES	1210	2.82	13.10
ALL OTHER MANAGERS AND ADMINISTRATORS	200	0.47	29.74
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	3890	9.07	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	210	0.49	16.99
BUDGET ANALYSTS	60	0.14	6.56
ALL OTHER FINANCIAL SPECIALISTS	50	0.12	16.67
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	280	0.65	27.24
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	70	0.16	4.23
COST ESTIMATORS	260	0.61	27.38
ALL OTHER MANAGEMENT SUPPORT WORKERS	230	0.54	21.65
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	70	0.16	10.00
ELECTRICAL AND ELECTRONIC ENGINEERS	100	0.23	6.00
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	180	0.42	7.82
SAFETY ENGINEERS, EXCEPT MINING	70	0.16	10.00
MECHANICAL ENGINEERS	500	1.17	15.51
ALL OTHER ENGINEERS	110	0.26	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	100	0.23	34.65
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	80	0.19	22.37
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	140	0.33	21.32
DRAFTERS	480	1.12	23.79
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	140	0.33	N/A
PHYSICAL SCIENTISTS	90	0.21	13.19
LIFE SCIENTISTS	10	0.02	N/A
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	60	0.14	12.50
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	170	0.40	10.78
COMPUTER PROGRAMMERS	90	0.21	16.28
COMPUTER PROGRAMMER AIDES	30	0.07	12.90
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	40	0.09	23.81

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED METAL PRODUCTS
SIC = 34
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	70	0.16	7.04
DESIGNERS, EXCEPT INTERIOR DESIGNERS	60	0.14	18.33
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	140	0.33	15.22
SALES AND RELATED OCCUPATIONS	1030	2.40	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	160	0.37	16.98
SALES ENGINEERS	80	0.19	27.38
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	160	0.37	33.54
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	500	1.17	27.78
ALL OTHER SALES AND RELATED WORKERS	120	0.28	30.17
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	4720	11.00	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	180	0.42	17.98
ADJUSTMENT CLERKS	110	0.26	15.45
SECRETARIES	620	1.45	19.65
STENOGRAPHERS	10	0.02	22.22
RECEPTIONISTS AND INFORMATION CLERKS	70	0.16	30.56
TYPISTS	60	0.14	17.19
TYPISTS, WORD PROCESSING EQUIPMENT	30	0.07	10.00
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	80	0.19	5.13
FILE CLERKS	80	0.19	25.33
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	130	0.30	35.07
PROCUREMENT CLERKS	80	0.19	9.33
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	770	1.80	19.06
PAYROLL AND TIMEKEEPING CLERKS	110	0.26	14.41
BILLING, COST AND RATE CLERKS	110	0.26	15.79
GENERAL OFFICE CLERKS	570	1.33	38.60
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	60	0.14	13.33
DATA ENTRY KEYERS, EXCEPT COMPOSING	130	0.30	26.40
ALL OTHER OFFICE MACHINE OPERATORS	30	0.07	17.24
SWITCHBOARD OPERATORS	70	0.16	20.90
PRODUCTION, PLANNING AND EXPEDITING CLERKS	310	0.72	20.45
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	40	0.09	26.19
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	280	0.65	15.14
TRAFFIC, SHIPPING AND RECEIVING CLERKS	630	1.47	17.65
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	80	0.19	30.12
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	80	0.19	26.19
SERVICE OCCUPATIONS	750	1.75	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED METAL PRODUCTS
SIC = 34
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SERVICE SUPERVISORS	130	0.30	N/A
GUARDS AND WATCH GUARDS	140	0.33	10.56
JANITORS & CLEANERS, EXCEPT MAIDS & HOUSE CLEANE	430	1.00	12.76
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.02	N/A
ALL OTHER SERVICE WORKERS	40	0.09	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	29150	67.96	N/A
1ST LINE SUPERS - MECHANICS, INSTALLERS, REPAIRE	160	0.37	12.96
MANAGER/SUPERS, CONSTR TRADES & EXTRACTIVE WORKE	60	0.14	16.13
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	1850	4.31	11.59
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	70	0.16	9.09
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	70	0.16	30.00
PRECISION INSPECTORS, TESTERS AND GRADERS	560	1.31	16.13
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	1190	2.77	9.88
MACHINERY MAINTENANCE MECHANICS	590	1.38	10.61
MILLWRIGHTS	90	0.21	2.17
MACHINERY MAINTENANCE WORKERS	80	0.19	3.95
MAINTENANCE REPAIRERS, GENERAL UTILITY	310	0.72	24.35
BUS, TRUCK MECHANICS, DIESEL ENGINE SPECIALISTS	10	0.02	8.33
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	210	0.49	N/A
CARPENTERS	40	0.09	N/A
ELECTRICIANS	140	0.33	8.03
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	50	0.12	28.00
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	80	0.19	2.47
TOOL AND DIE MAKERS	600	1.40	15.38
MACHINISTS	1290	3.01	20.44
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	350	0.82	31.88
PATTERN AND MODEL MAKERS, WOOD	50	0.12	5.77
SHEET METAL WORKERS	1580	3.68	30.86
ALL OTHER PRECISION METAL WORKERS	190	0.44	N/A
PRECISION FOUNDRY MOLD AND CORE MAKERS	80	0.19	32.05
ALL OTHER PRECISION METAL WORKERS	50	0.12	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	590	1.38	23.40
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	240	0.56	47.08
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	300	0.70	37.97

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED METAL PRODUCTS
SIC = 34
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
GRINDNG,LAPPNG,BUFFNG MCH TOOL STTRS,SET-UP	370	0.86	37.50
MACHINE TOOL CUTTING OPERATORS AND TENDERS	1600	3.73	17.22
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	630	1.47	31.60
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	490	1.14	29.39
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	180	0.42	41.71
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	1230	2.87	41.19
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	280	0.65	20.14
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	70	0.16	22.39
WELDING MACHINE SETTERS AND SET-UP OPERATORS	160	0.37	29.11
SOLDERING, BRAZING MACH SETTERS, SET-UP OPERATOR	10	0.02	33.33
METAL FABRICATORS, STRUCTURAL METAL PRODUCTS	1010	2.35	32.48
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	30	0.07	17.24
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	20	0.05	N/A
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	320	0.75	39.81
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	630	1.47	20.67
NONELECTROLYTIC PLTNG, CTING MCH STTRS, SET-UP	50	0.12	28.85
NONELECTROLYTIC PLATNG, COATNG MCH OPS & TENDERS	30	0.07	33.33
HEATING EQUIPMENT SETTERS, SET-UP OPS, MET & PLA	80	0.19	9.76
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	110	0.26	16.04
FURNACE OPERATORS AND TENDERS	90	0.21	45.88
HEATERS, METAL AND PLASTIC	40	0.09	25.71
A O METAL,PLASTIC MACH SETTERS,SET-UP OPERATORS	810	1.89	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	970	2.26	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	10	0.02	23.08
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.02	N/A
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	20	0.05	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDE	590	1.38	46.25
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDE	50	0.12	19.23
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	150	0.35	18.00
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	180	0.42	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	280	0.65	N/A
ALL OTHER PRECISION ASSEMBLERS	150	0.35	N/A
WELDERS AND CUTTERS	560	1.31	41.74
SOLDERERS AND BRAZERS	20	0.05	23.53
GRINDING AND POLISHING WORKERS, HAND	490	1.14	34.21
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	2160	5.04	18.96
ALL OTHER HAND WORKERS	270	0.63	47.81
PLANT AND SYSTEMS OCCUPATIONS	10	0.02	33.33
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	230	0.54	36.64
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	180	0.42	37.29
ALL OTHER TRANSPORTATION AND RELATED WORKERS	40	0.09	41.67

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED METAL PRODUCTS
SIC = 34
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CRANE AND TOWER OPERATORS	50	0.12	26.53
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	270	0.63	21.35
CONVEYOR OPERATORS AND TENDERS	80	0.19	19.23
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.02	N/A
MECHANIC AND REPAIRER HELPERS	50	0.12	7.84
MACHINE FEEDERS AND OFFBEARERS	600	1.40	49.67
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	480	1.12	20.50
HAND PACKERS AND PACKAGERS	950	2.21	24.60
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	1210	2.82	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CUTLERY, HAND TOOLS AND HARDWARE
SIC = 342
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	9530	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	710	7.45	N/A
FINANCIAL MANAGERS	90	0.94	10.11
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	50	0.52	1.88
PURCHASING MANAGERS	60	0.63	8.12
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	130	1.36	3.90
ADMINISTRATIVE SERVICES MANAGERS	30	0.31	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	70	0.73	5.05
INDUSTRIAL PRODUCTION MANAGERS	130	1.36	8.50
GENERAL MANAGERS AND TOP EXECUTIVES	110	1.15	14.22
ALL OTHER MANAGERS AND ADMINISTRATORS	30	0.31	5.43
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1290	13.54	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	100	1.05	N/A
BUDGET ANALYSTS	30	0.31	N/A
ALL OTHER FINANCIAL SPECIALISTS	30	0.31	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.42	13.35
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	40	0.42	N/A
COST ESTIMATORS	20	0.21	5.26
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	0.63	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.10	11.11
ELECTRICAL AND ELECTRONIC ENGINEERS	50	0.52	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	80	0.84	1.33
SAFETY ENGINEERS, EXCEPT MINING	50	0.52	8.01
MECHANICAL ENGINEERS	150	1.57	3.37
ALL OTHER ENGINEERS	30	0.31	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	20	0.21	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.21	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	40	0.42	5.83
DRAFTERS	50	0.52	3.46
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	40	0.42	N/A
PHYSICAL SCIENTISTS	70	0.73	N/A
LIFE SCIENTISTS	10	0.10	N/A
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	40	0.42	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	100	1.05	N/A
COMPUTER PROGRAMMERS	40	0.42	2.70
COMPUTER PROGRAMMER AIDES	20	0.21	N/A
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	20	0.21	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CUTLERY, HAND TOOLS AND HARDWARE
SIC = 342
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	20	0.21	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.21	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	100	1.05	N/A
SALES AND RELATED OCCUPATIONS	300	3.15	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	80	0.84	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	40	0.42	11.11
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	140	1.47	9.34
ALL OTHER SALES AND RELATED WORKERS	40	0.42	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1160	12.17	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	70	0.73	6.94
ADJUSTMENT CLERKS	70	0.73	N/A
SECRETARIES	110	1.15	12.82
RECEPTIONISTS AND INFORMATION CLERKS	20	0.21	5.26
TYPISTS	20	0.21	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	30	0.31	N/A
FILE CLERKS	30	0.31	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	40	0.42	4.04
PROCUREMENT CLERKS	40	0.42	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	110	1.15	17.42
PAYROLL AND TIMEKEEPING CLERKS	30	0.31	12.49
BILLING, COST AND RATE CLERKS	40	0.42	5.08
GENERAL OFFICE CLERKS	60	0.63	45.94
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	30	0.31	4.87
DATA ENTRY KEYERS, EXCEPT COMPOSING	30	0.31	N/A
ALL OTHER OFFICE MACHINE OPERATORS	20	0.21	N/A
SWITCHBOARD OPERATORS	10	0.10	7.69
PRODUCTION, PLANNING AND EXPEDITING CLERKS	60	0.63	9.65
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	30	0.31	5.65
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	140	1.47	3.19
TRAFFIC, SHIPPING AND RECEIVING CLERKS	120	1.26	15.26
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	30	0.31	5.65
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.42	N/A
SERVICE OCCUPATIONS	210	2.20	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.21	N/A
GUARDS AND WATCH GUARDS	50	0.52	4.99

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CUTLERY, HAND TOOLS AND HARDWARE
SIC = 342
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	90	0.94	N/A
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.10	N/A
ALL OTHER SERVICE WORKERS	40	0.42	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5860	61.49	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	50	0.52	2.94
MANAGER/SUPERS,CONSTR TRADES & EXTRACTIVE WORKR	30	0.31	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	300	3.15	6.71
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.21	N/A
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	20	0.21	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	30	0.31	7.71
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	500	5.25	1.80
MACHINERY MAINTENANCE MECHANICS	270	2.83	4.38
MILLWRIGHTS	20	0.21	7.87
MACHINERY MAINTENANCE WORKERS	30	0.31	8.44
MAINTENANCE REPAIRERS, GENERAL UTILITY	70	0.73	22.43
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	10	0.10	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.10	N/A
CARPENTERS	10	0.10	N/A
ELECTRICIANS	40	0.42	2.77
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.10	N/A
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.10	N/A
TOOL AND DIE MAKERS	200	2.10	7.57
MACHINISTS	60	0.63	13.92
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	210	2.20	28.09
PATTERN AND MODEL MAKERS, WOOD	30	0.31	N/A
PRECISION LAYOUT WORKERS, METAL	10	0.10	N/A
SHEET METAL WORKERS	10	0.10	N/A
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	40	0.42	16.16
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	40	0.42	39.80
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	20	0.21	40.50
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	80	0.84	36.62
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	80	0.84	5.65
MACHINE TOOL CUTTING OPERATORS AND TENDERS	410	4.30	11.71
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	230	2.41	5.74
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	20	0.21	12.49
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	20	0.21	36.97
FORGING MACHINE SETTERS AND SET-UP OPS, MET & PL	30	0.31	31.49
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	140	1.47	19.76
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	20	0.21	6.42

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
CUTLERY, HAND TOOLS AND HARDWARE
SIC = 342
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
WELDING MACHINE SETTERS AND SET-UP OPERATORS	20	0.21	N/A
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	10	0.10	33.50
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	100	1.05	7.14
HEATING EQUIPMENT SETTERS, SET-UP OPS, MET & PLA	70	0.73	12.21
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	80	0.84	16.16
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	10	0.10	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	200	2.10	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	10	0.10	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.10	48.59
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	20	0.21	43.83
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	20	0.21	9.52
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	70	0.73	19.00
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.10	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.21	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	20	0.21	38.67
FITTERS, STRUCTURAL METAL - PRECISION	10	0.10	N/A
ALL OTHER PRECISION ASSEMBLERS	10	0.10	N/A
WELDERS AND CUTTERS	10	0.10	24.74
GRINDING AND POLISHING WORKERS, HAND	130	1.36	27.03
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	800	8.39	12.50
ALL OTHER HAND WORKERS	10	0.10	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.10	48.41
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.10	16.66
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.10	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.21	10.20
MECHANIC AND REPAIRER HELPERS	10	0.10	N/A
MACHINE FEEDERS AND OFFBEARERS	160	1.68	42.61
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	290	3.04	6.38
HAND PACKERS AND PACKAGERS	390	4.09	5.08
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	300	3.15	5.64
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.10	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PLUMBING AND HEATING, EXCEPT ELECTRIC
SIC = 343
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1220	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	150	12.30	N/A
FINANCIAL MANAGERS	20	1.64	8.69
PURCHASING MANAGERS	10	0.82	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.82	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	1.64	N/A
INDUSTRIAL PRODUCTION MANAGERS	10	0.82	12.85
GENERAL MANAGERS AND TOP EXECUTIVES	80	6.56	1.76
ALL OTHER MANAGERS AND ADMINISTRATORS	*	N/A	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	280	22.95	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.82	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.82	N/A
COST ESTIMATORS	10	0.82	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	4.92	N/A
MECHANICAL ENGINEERS	90	7.38	6.62
ALL OTHER ENGINEERS	10	0.82	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.82	N/A
DRAFTERS	60	4.92	2.35
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.82	N/A
COMPUTER PROGRAMMERS	10	0.82	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	*	N/A	N/A
SALES AND RELATED OCCUPATIONS	70	5.74	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.82	19.99
SALES ENGINEERS	30	2.46	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	1.64	13.46
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	10	0.82	28.28
ALL OTHER SALES AND RELATED WORKERS	10	0.82	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	140	11.48	N/A
SECRETARIES	40	3.28	N/A
TYPISTS	20	1.64	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	10	0.82	11.11
GENERAL OFFICE CLERKS	10	0.82	15.38
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.82	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PLUMBING AND HEATING, EXCEPT ELECTRIC
SIC = 343
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.82	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	10	0.82	15.71
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	2.46	N/A
SERVICE OCCUPATIONS	10	0.82	N/A
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	10	0.82	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	590	48.36	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	50	4.10	6.87
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.82	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	10	0.82	N/A
MACHINERY MAINTENANCE MECHANICS	10	0.82	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.82	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.82	N/A
TOOL AND DIE MAKERS	10	0.82	N/A
MACHINISTS	10	0.82	28.28
SHEET METAL WORKERS	70	5.74	19.89
PRECISION FOUNDRY MOLD AND CORE MAKERS	30	2.46	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.82	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	20	1.64	11.18
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	10	0.82	N/A
MACHINE TOOL CUTTING OPERATORS AND TENDERS	20	1.64	N/A
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	10	0.82	N/A
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	10	0.82	N/A
WELDING MACHINE SETTERS AND SET-UP OPERATORS	10	0.82	46.15
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	1.64	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	10	0.82	21.65
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.82	N/A
ALL OTHER PRECISION ASSEMBLERS	10	0.82	33.16
WELDERS AND CUTTERS	10	0.82	17.67
GRINDING AND POLISHING WORKERS, HAND	30	2.46	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	60	4.92	18.38
ALL OTHER HAND WORKERS	10	0.82	13.32
CRANE AND TOWER OPERATORS	10	0.82	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.82	N/A
MECHANIC AND REPAIRER HELPERS	20	1.64	N/A
HAND PACKERS AND PACKAGERS	10	0.82	10.10
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	100	8.20	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.82	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED STRUCTURAL METAL PRODUCTS
SIC = 344
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	9530	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	740	7.76	N/A
FINANCIAL MANAGERS	180	1.89	21.40
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.10	37.26
PURCHASING MANAGERS	30	0.31	41.06
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.21	41.57
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.10	28.57
INDUSTRIAL PRODUCTION MANAGERS	90	0.94	20.73
GENERAL MANAGERS AND TOP EXECUTIVES	350	3.67	13.48
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.52	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	540	5.67	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.21	47.43
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	80	0.84	32.83
COST ESTIMATORS	100	1.05	31.34
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.21	N/A
MECHANICAL ENGINEERS	100	1.05	39.71
DRAFTERS	160	1.68	34.37
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.31	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.10	41.45
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	0.31	N/A
SALES AND RELATED OCCUPATIONS	210	2.20	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	140	1.47	40.63
ALL OTHER SALES AND RELATED WORKERS	70	0.73	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	930	9.76	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	0.31	29.26
SECRETARIES	150	1.57	22.60
TYPISTS	10	0.10	39.99
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	280	2.94	23.51
PAYROLL AND TIMEKEEPING CLERKS	10	0.10	37.79
GENERAL OFFICE CLERKS	160	1.68	42.29
SWITCHBOARD OPERATORS	10	0.10	47.87
PRODUCTION, PLANNING AND EXPEDITING CLERKS	40	0.42	46.26
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.31	40.21

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED STRUCTURAL METAL PRODUCTS
SIC = 344
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TRAFFIC, SHIPPING AND RECEIVING CLERKS	150	1.57	22.70
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.21	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	0.52	N/A
SERVICE OCCUPATIONS	100	1.05	N/A
ALL OTHER SERVICE SUPERVISORS	30	0.31	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	70	0.73	45.14
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	7010	73.56	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	460	4.83	14.61
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.10	N/A
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.21	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	40	0.42	38.12
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	80	0.84	37.96
MACHINERY MAINTENANCE MECHANICS	10	0.10	45.50
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	0.52	31.62
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	180	1.89	N/A
PAINTERS,PAPERHANGERS, CONSTRUCTION, MAINTENANCE	30	0.31	42.55
A O CONSTRUCTION,EXTRACTIVE WORKERS,EXC.HELPER	90	0.94	N/A
MACHINISTS	80	0.84	37.15
PRECISION LAYOUT WORKERS, METAL	50	0.52	49.20
SHEET METAL WORKERS	1410	14.80	28.07
ALL OTHER PRECISION METAL WORKERS	80	0.84	N/A
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	160	1.68	36.63
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	10	0.10	30.00
WELDING MACHINE SETTERS AND SET-UP OPERATORS	70	0.73	26.19
METAL FABRICATORS, STRUCTURAL METAL PRODUCTS	970	10.18	33.78
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	20	0.21	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	10	0.10	N/A
FURNACE OPERATORS AND TENDERS	10	0.10	N/A
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	600	6.30	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	930	9.76	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.21	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	130	1.36	N/A
ALL OTHER PRECISION ASSEMBLERS	30	0.31	N/A
WELDERS AND CUTTERS	270	2.83	40.04
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	580	6.09	29.15
ALL OTHER HAND WORKERS	50	0.52	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
FABRICATED STRUCTURAL METAL PRODUCTS
SIC = 344
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	110	1.15	40.13
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	60	0.63	43.52
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	70	0.73	41.10
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.21	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	40	0.42	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	300	3.15	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SCREW MACHINE PRODUCTS, BOLTS, ETC.
SIC = 345
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2470	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	220	8.91	N/A
FINANCIAL MANAGERS	40	1.62	26.31
PURCHASING MANAGERS	10	0.40	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.40	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.40	N/A
INDUSTRIAL PRODUCTION MANAGERS	50	2.02	22.48
GENERAL MANAGERS AND TOP EXECUTIVES	110	4.45	11.29
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.40	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	80	3.24	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.40	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.81	23.38
COST ESTIMATORS	10	0.40	32.77
MECHANICAL ENGINEERS	20	0.81	11.54
DRAFTERS	10	0.40	14.28
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.40	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.81	N/A
SALES AND RELATED OCCUPATIONS	70	2.83	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	50	2.02	30.65
ALL OTHER SALES AND RELATED WORKERS	10	0.40	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	290	11.74	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.40	23.57
SECRETARIES	30	1.21	18.75
RECEPTIONISTS AND INFORMATION CLERKS	10	0.40	12.49
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	80	3.24	10.91
PAYROLL AND TIMEKEEPING CLERKS	10	0.40	N/A
BILLING, COST AND RATE CLERKS	10	0.40	N/A
GENERAL OFFICE CLERKS	30	1.21	22.20
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	0.81	24.03
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	10	0.40	12.85
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	2.83	12.18
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	1.21	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SCREW MACHINE PRODUCTS, BOLTS, ETC.
SIC = 345
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SERVICE OCCUPATIONS	30	1.21	N/A
GUARDS AND WATCH GUARDS	10	0.40	N/A
JANITORS & CLEANERS, EXCEPT MAIDS & HOUSE CLEANERS	20	0.81	24.25
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1800	72.87	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRES	10	0.40	44.72
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	120	4.86	11.40
PRECISION INSPECTORS, TESTERS AND GRADERS	40	1.62	23.92
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	30	1.21	22.09
MACHINERY MAINTENANCE MECHANICS	20	0.81	20.03
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.40	31.62
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.40	N/A
TOOL AND DIE MAKERS	40	1.62	16.17
MACHINISTS	320	12.96	11.69
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	30	1.21	25.30
ALL OTHER PRECISION METAL WORKERS	10	0.40	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	320	12.96	12.77
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET	60	2.43	19.91
MACHINE TOOL CUTTING OPERATORS AND TENDERS	230	9.31	14.60
EXTRUDING, DRAWING MACH SETTERS, METAL AND PLAST	30	1.21	N/A
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	30	1.21	48.70
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	30	1.21	10.20
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	30	1.21	43.50
METAL FABRICATORS, STRUCTURAL METAL PRODUCTS	30	1.21	N/A
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	100	4.05	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	40	1.62	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.40	N/A
GRINDING AND POLISHING WORKERS, HAND	20	0.81	32.75
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.40	30.00
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.40	42.85
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	1.21	34.94
HAND PACKERS AND PACKAGERS	20	0.81	24.20
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	190	7.69	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.40	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METAL FORGINGS AND STAMPINGS
SIC = 346
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4750	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	380	8.00	N/A
FINANCIAL MANAGERS	70	1.47	21.17
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.21	9.99
PURCHASING MANAGERS	20	0.42	5.26
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	30	0.63	12.83
ADMINISTRATIVE SERVICES MANAGERS	20	0.42	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.63	13.36
INDUSTRIAL PRODUCTION MANAGERS	60	1.26	21.53
GENERAL MANAGERS AND TOP EXECUTIVES	120	2.53	13.60
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.21	32.73
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	520	10.95	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.42	19.92
ALL OTHER FINANCIAL SPECIALISTS	10	0.21	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.84	39.13
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.21	17.32
COST ESTIMATORS	30	0.63	37.23
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.21	23.57
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	40	0.84	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	10	0.21	14.14
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	40	0.84	4.22
SAFETY ENGINEERS, EXCEPT MINING	20	0.42	16.66
MECHANICAL ENGINEERS	30	0.63	18.75
ALL OTHER ENGINEERS	10	0.21	31.49
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	30	0.63	9.44
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.42	6.24
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.42	18.75
DRAFTERS	20	0.42	16.13
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	50	1.05	4.56
PHYSICAL SCIENTISTS	10	0.21	41.23
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	20	0.42	23.57
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	20	0.42	15.59
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	30	0.63	6.18
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.42	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.21	N/A
SALES AND RELATED OCCUPATIONS	90	1.89	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METAL FORGINGS AND STAMPINGS
SIC = 346
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.42	25.98
SALES ENGINEERS	10	0.21	17.20
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.42	25.64
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	30	0.63	40.99
ALL OTHER SALES AND RELATED WORKERS	10	0.21	27.95
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	460	9.68	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.21	8.33
SECRETARIES	70	1.47	7.42
RECEPTIONISTS AND INFORMATION CLERKS	10	0.21	14.28
TYPISTS	10	0.21	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.21	N/A
FILE CLERKS	10	0.21	39.99
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	30	0.63	27.11
PROCUREMENT CLERKS	10	0.21	28.57
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	0.84	32.22
PAYROLL AND TIMEKEEPING CLERKS	30	0.63	5.23
BILLING, COST AND RATE CLERKS	10	0.21	22.26
GENERAL OFFICE CLERKS	40	0.84	25.78
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.21	N/A
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.21	12.37
ALL OTHER OFFICE MACHINE OPERATORS	10	0.21	19.24
SWITCHBOARD OPERATORS	10	0.21	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	40	0.84	14.90
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.21	19.99
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.63	22.00
TRAFFIC, SHIPPING AND RECEIVING CLERKS	50	1.05	9.72
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.21	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.42	N/A
SERVICE OCCUPATIONS	100	2.11	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.21	17.20
GUARDS AND WATCH GUARDS	40	0.84	5.71
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	50	1.05	12.32
AGRICULTURAL,FORESTRY,FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METAL FORGINGS AND STAMPINGS
SIC = 346
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3210	67.58	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	30	0.63	10.71
MANAGER/SUPERS, CONSTR TRADES & EXTRACTIVE WORKRS	20	0.42	22.16
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	210	4.42	11.82
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.21	N/A
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	20	0.42	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	180	3.79	8.62
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	130	2.74	10.79
MACHINERY MAINTENANCE MECHANICS	40	0.84	12.34
MILLWRIGHTS	70	1.47	N/A
MACHINERY MAINTENANCE WORKERS	30	0.63	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	60	1.26	25.11
ELECTRICIANS	30	0.63	3.84
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	20	0.42	9.42
TOOL AND DIE MAKERS	210	4.42	11.20
MACHINISTS	450	9.47	23.05
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	10	0.21	N/A
PATTERN AND MODEL MAKERS, WOOD	10	0.21	14.43
PRECISION LAYOUT WORKERS, METAL	10	0.21	14.28
SHEET METAL WORKERS	10	0.21	N/A
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	10	0.21	7.14
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	10	0.21	42.25
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	120	2.53	30.51
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	90	1.89	37.57
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	30	0.63	16.31
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	10	0.21	18.63
ROLLING MACHINE SETTERS, METAL AND PLASTIC	10	0.21	44.72
FORGING MACHINE SETTERS AND SET-UP OPS, MET & PL	40	0.84	31.42
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	250	5.26	19.01
WELDING MACHINE SETTERS AND SET-UP OPERATORS	20	0.42	18.95
WELDING MACHINE OPERATORS AND TENDERS	20	0.42	22.59
SOLDERING, BRAZING MACH SETTERS, SET-UP OPERATOR	10	0.21	19.99
METAL FABRICATORS, STRUCTURAL METAL PRODUCTS	10	0.21	N/A
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	10	0.21	N/A
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	10	0.21	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	20	0.42	27.85
FURNACE OPERATORS AND TENDERS	30	0.63	N/A
HEATERS, METAL AND PLASTIC	30	0.63	23.52
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	150	3.16	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METAL FORGINGS AND STAMPINGS
SIC = 346
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	170	3.58	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS,TENDER	30	0.63	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS,TENDER	10	0.21	39.52
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	10	0.21	33.52
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.21	20.35
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.42	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.21	N/A
WELDERS AND CUTTERS	40	0.84	15.07
GRINDING AND POLISHING WORKERS, HAND	30	0.63	32.73
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	90	1.89	10.42
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.21	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.21	18.89
CRANE AND TOWER OPERATORS	10	0.21	13.32
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.21	22.58
CONVEYOR OPERATORS AND TENDERS	60	1.26	11.49
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.21	N/A
MECHANIC AND REPAIRER HELPERS	10	0.21	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	40	0.84	14.52
HAND PACKERS AND PACKAGERS	60	1.26	15.80
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	130	2.74	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.21	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METAL SERVICES, NEC
SIC = 347
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	4060	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	410	10.10	N/A
FINANCIAL MANAGERS	80	1.97	27.80
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	20	0.49	30.93
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.25	43.03
INDUSTRIAL PRODUCTION MANAGERS	80	1.97	21.29
GENERAL MANAGERS AND TOP EXECUTIVES	210	5.17	17.97
ALL OTHER MANAGERS AND ADMINISTRATORS	30	0.74	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	110	2.71	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.49	37.50
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.25	28.86
COST ESTIMATORS	10	0.25	29.39
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.25	44.09
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.74	N/A
ALL OTHER PHYSICAL SCIENTISTS	10	0.25	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.25	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.49	N/A
SALES AND RELATED OCCUPATIONS	60	1.48	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.25	40.82
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	20	0.49	30.93
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	30	0.74	28.12
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	450	11.08	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.25	24.32
ADJUSTMENT CLERKS	10	0.25	40.06
SECRETARIES	40	0.99	31.03
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	110	2.71	20.06
BILLING, COST AND RATE CLERKS	10	0.25	22.26
GENERAL OFFICE CLERKS	110	2.71	34.16
SWITCHBOARD OPERATORS	10	0.25	40.82
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	0.74	36.77
TRAFFIC, SHIPPING AND RECEIVING CLERKS	110	2.71	18.22
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.25	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.49	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METAL SERVICES, NEC
SIC = 347
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SERVICE OCCUPATIONS	20	0.49	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	20	0.49	25.81
ALL OTHER SERVICE WORKERS	10	0.25	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3010	74.14	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.49	46.31
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	240	5.91	18.73
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.25	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	40	0.99	38.88
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	100	2.46	23.38
MACHINERY MAINTENANCE MECHANICS	50	1.23	26.88
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	1.23	30.04
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.25	N/A
MACHINISTS	10	0.25	40.82
ALL OTHER PRECISION METAL WORKERS	90	2.22	N/A
ALL OTHER PRECISION METAL WORKERS	50	1.23	N/A
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	260	6.40	30.75
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET	520	12.81	23.57
NONELECTROLYTIC PLTNG, CTING MCH STTRS, SET-UP	30	0.74	44.01
NONELECTROLYTIC PLATNG, COATNG MCH OPS & TENDERS	10	0.25	49.25
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	100	2.46	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	90	2.22	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	50	1.23	45.75
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDERS	320	7.88	30.78
CLEANING, WASHING,PICKLING EQUIPMENT OPS,TENDERS	10	0.25	49.69
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.25	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	50	1.23	N/A
GRINDING AND POLISHING WORKERS, HAND	200	4.93	35.29
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	100	2.46	44.40
ALL OTHER HAND WORKERS	130	3.20	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	50	1.23	26.38
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	60	1.48	37.45
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.25	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	20	0.49	N/A
HAND PACKERS AND PACKAGERS	220	5.42	33.03
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	120	2.96	35.65
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FABRICATED METAL PRODUCTS
SIC = 349
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	6760	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	630	9.32	N/A
FINANCIAL MANAGERS	100	1.48	18.20
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.30	34.78
PURCHASING MANAGERS	30	0.44	29.54
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	50	0.74	25.88
INDUSTRIAL PRODUCTION MANAGERS	80	1.18	23.51
GENERAL MANAGERS AND TOP EXECUTIVES	200	2.96	13.81
ALL OTHER MANAGERS AND ADMINISTRATORS	160	2.37	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	700	10.36	N/A
BUDGET ANALYSTS	10	0.15	43.03
ALL OTHER FINANCIAL SPECIALISTS	40	0.59	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	60	0.89	32.64
COST ESTIMATORS	50	0.74	40.29
ALL OTHER MANAGEMENT SUPPORT WORKERS	90	1.33	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.44	34.13
MECHANICAL ENGINEERS	80	1.18	24.44
ALL OTHER ENGINEERS	20	0.30	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.30	43.74
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	30	0.44	49.96
DRAFTERS	140	2.07	30.03
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	50	0.74	N/A
COMPUTER PROGRAMMERS	20	0.30	36.73
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	10	0.15	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	60	0.89	N/A
SALES AND RELATED OCCUPATIONS	200	2.96	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	80	1.18	34.37
ALL OTHER SALES AND RELATED WORKERS	120	1.78	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	860	12.72	N/A
ADJUSTMENT CLERKS	20	0.30	47.45
SECRETARIES	150	2.22	33.67
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.15	35.13
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.15	43.03

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FABRICATED METAL PRODUCTS
SIC = 349
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
FILE CLERKS	20	0.30	44.09
PROCUREMENT CLERKS	10	0.15	33.50
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	110	1.63	13.95
PAYROLL AND TIMEKEEPING CLERKS	20	0.30	37.58
BILLING, COST AND RATE CLERKS	20	0.30	36.00
ALL OTHER OFFICE MACHINE OPERATORS	60	0.89	N/A
SWITCHBOARD OPERATORS	20	0.30	30.55
PRODUCTION, PLANNING AND EXPEDITING CLERKS	80	1.18	22.08
STOCK CLERKS- STOCKROOM,WAREHOUSE,STORAGE YARD	40	0.59	47.50
TRAFFIC, SHIPPING AND RECEIVING CLERKS	100	1.48	27.65
ALL OTHER MATERIAL RECORDING,SCHEDULING,ETC	10	0.15	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	190	2.81	N/A
SERVICE OCCUPATIONS	90	1.33	N/A
ALL OTHER SERVICE SUPERVISORS	50	0.74	N/A
ALL OTHER PROTECTIVE SERVICE WORKERS	10	0.15	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANER	30	0.44	39.37
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	4280	63.31	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.30	46.35
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	230	3.40	17.72
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.30	N/A
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	90	1.33	33.04
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	70	1.04	N/A
MACHINERY MAINTENANCE MECHANICS	60	0.89	40.41
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.44	33.66
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.15	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.30	N/A
TOOL AND DIE MAKERS	70	1.04	31.54
MACHINISTS	290	4.29	28.12
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	70	1.04	45.62
ALL OTHER PRECISION METAL WORKERS	70	1.04	N/A
ALL OTHER PRECISION METAL WORKERS	40	0.59	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	160	2.37	35.76
MACHINE TOOL CUTTING OPERATORS AND TENDERS	80	1.18	44.46
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	230	3.40	27.12
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	40	0.59	30.67
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	270	3.99	45.76

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS FABRICATED METAL PRODUCTS
SIC = 349
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	70	1.04	36.34
WELDING MACHINE SETTERS AND SET-UP OPERATORS	40	0.59	47.29
FURNACE OPERATORS AND TENDERS	10	0.15	38.49
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	490	7.25	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	130	1.92	N/A
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	20	0.30	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.15	37.68
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDERS	90	1.33	48.66
ALL OTHER MACHINE OPERATORS AND TENDERS	100	1.48	N/A
ALL OTHER PRECISION ASSEMBLERS	70	1.04	N/A
GRINDING AND POLISHING WORKERS, HAND	50	0.74	47.32
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	300	4.44	22.27
ALL OTHER HAND WORKERS	310	4.59	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	50	0.74	47.96
ALL OTHER MOTOR VEHICLE OPERATORS	20	0.30	N/A
ALL OTHER TRANSPORTATION AND RELATED WORKERS	30	0.44	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	60	0.89	36.54
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	20	0.30	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	30	0.44	N/A
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	540	7.99	N/A
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	10	0.15	N/A

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N/A - NOT AVAILABLE

Machinery Except Electrical

SIC 35

This major group includes establishments engaged in manufacturing machinery and equipment, other than electrical equipment and transportation equipment. Machines powered by built-in or detachable motors ordinarily are included in this major group, with the exception of electrical household appliances. This industry along with electrical and electronic machinery and equipment are the largest manufacturing industries in the State, employing 35 percent of Massachusetts manufacturing workers.

The largest major occupational category is production and maintenance with 38,000 workers representing over 38 percent of employment in the major group. The machinist occupation with 5,670 workers is the largest in the production and maintenance category. Other large occupations are production supervisors, 2,260, all other helpers and laborers, 1,870, and electrical equipment assemblers with 1,690 workers.

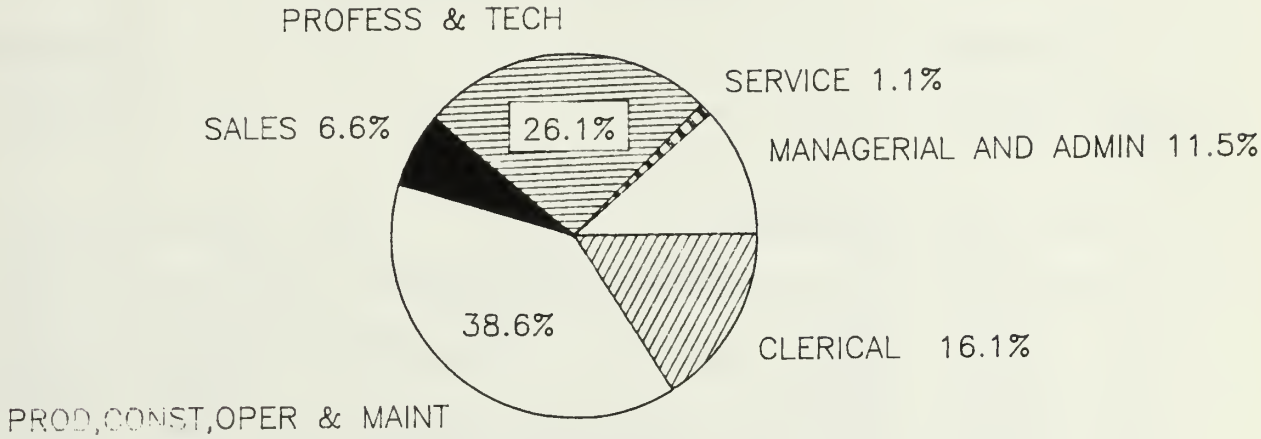
The second largest occupational category is the professional and technical category with 25,650 workers or 26 percent of group employment. The electrical and electronic engineer occupation with over 6,000 workers is not only the largest single occupation in the professional and technical category but also the top occupation in the major industrial group. The second largest occupation in the professional and technical area is electrical technicians and technologists with 2,940 workers.

The office and computing machines segment (SIC 357) has the highest percentage of professional and technical occupations (39.3 percent). The various engineers and engineering technicians needed in the computer industries accounts for this high percentage. This industry which manufactures electronic computing equipment, typewriters, calculating and accounting machines, scales, and balances (except laboratory) and

miscellaneous office machinery had an employment loss of about 3,500 since the last survey period in 1983.

MACHINERY, EXCEPT ELECTRICAL (SIC-35)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Electrical and Electronic Engineers	6080
2.	Machinists	5670
3.	Secretaries	3310
4.	Electrical, Electronic Engineering Technicians and Technologists	2940
5.	Sales Representatives, Scientific Products and Services Except Retail	2570
6.	General Managers and Top Executives	2440
7.	First Line Supervisors - Production, Operating Workers	2260
8.	Engineering, Mathematical, Materials Science Managers	2070
9.	All Other Helpers, Laborers, Material Movers	1870
10.	Electrical, Electronic Equipment Assemblers	1690

OCCUPATIONS OF EMPLOYEES
MACHINERY, EXCEPT ELECTRICAL
SIC = 35
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	98300	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	11350	11.55	N/A
FINANCIAL MANAGERS	1410	1.43	14.50
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	450	0.46	12.69
PURCHASING MANAGERS	290	0.30	16.96
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	1250	1.27	12.08
ADMINISTRATIVE SERVICES MANAGERS	350	0.36	14.57
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	2070	2.11	13.34
INDUSTRIAL PRODUCTION MANAGERS	1650	1.68	16.16
GENERAL MANAGERS AND TOP EXECUTIVES	2440	2.48	12.30
ALL OTHER MANAGERS AND ADMINISTRATORS	1440	1.46	25.85
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	25650	26.09	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	900	0.92	15.08
BUDGET ANALYSTS	300	0.31	19.26
ALL OTHER FINANCIAL SPECIALISTS	550	0.56	25.73
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	840	0.85	13.56
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	550	0.56	11.57
COST ESTIMATORS	370	0.38	34.49
ALL OTHER MANAGEMENT SUPPORT WORKERS	1590	1.62	21.51
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	20	0.02	31.82
CHEMICAL ENGINEERS	120	0.12	21.67
CIVIL ENGINEERS, INCLUDING TRAFFIC	20	0.02	35.29
ELECTRICAL AND ELECTRONIC ENGINEERS	6080	6.19	10.26
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	870	0.89	17.16
MECHANICAL ENGINEERS	1440	1.46	15.11
ALL OTHER ENGINEERS	630	0.64	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	10	0.01	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	2940	2.99	15.32
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	210	0.21	25.47
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	580	0.59	25.09
DRAFTERS	1030	1.05	21.34
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	1000	1.02	18.47
PHYSICAL SCIENTISTS	20	0.02	13.33
LIFE SCIENTISTS	20	0.02	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	50	0.05	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	1480	1.51	12.42
COMPUTER PROGRAMMERS	1660	1.69	29.86

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MACHINERY, EXCEPT ELECTRICAL
SIC = 35
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
COMPUTER PROGRAMMER AIDES	120	0.12	27.12
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	140	0.14	31.62
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	110	0.11	26.13
MATHEMATICAL SCIENTISTS	10	0.01	41.67
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	50	0.05	9.62
WRITERS AND EDITORS	180	0.18	15.22
TECHNICAL WRITERS	570	0.58	15.34
DESIGNERS, EXCEPT INTERIOR DESIGNERS	310	0.32	38.64
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	890	0.91	18.61
SALES AND RELATED OCCUPATIONS	6460	6.57	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	910	0.93	15.56
SALES ENGINEERS	1080	1.10	26.57
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	2570	2.61	16.76
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	630	0.64	34.39
ALL OTHER SALES AND RELATED WORKERS	1260	1.28	29.56
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	15790	16.06	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	1650	1.68	22.44
ADJUSTMENT CLERKS	310	0.32	18.77
SECRETARIES	3310	3.37	9.65
STENOGRAPHERS	50	0.05	16.33
RECEPTIONISTS AND INFORMATION CLERKS	190	0.19	27.08
TYPISTS	230	0.23	19.13
TYPISTS, WORD PROCESSING EQUIPMENT	180	0.18	37.78
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	190	0.19	23.71
FILE CLERKS	80	0.08	41.03
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	490	0.50	27.03
PROCUREMENT CLERKS	190	0.19	22.46
STATISTICAL CLERKS	50	0.05	34.78
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	1380	1.40	17.02
PAYROLL AND TIMEKEEPING CLERKS	180	0.18	21.71
BILLING, COST AND RATE CLERKS	220	0.22	30.45
GENERAL OFFICE CLERKS	1040	1.06	20.90
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	550	0.56	14.86
PERIPHERAL EDP EQUIPMENT OPERATORS	30	0.03	43.33
DATA ENTRY KEYERS, EXCEPT COMPOSING	390	0.40	18.30
ALL OTHER OFFICE MACHINE OPERATORS	70	0.07	47.22
SWITCHBOARD OPERATORS	210	0.21	18.27

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MACHINERY, EXCEPT ELECTRICAL
SIC = 35
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRODUCTION, PLANNING AND EXPEDITING CLERKS	1550	1.58	16.16
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	60	0.06	25.42
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	1330	1.35	21.36
TRAFFIC, SHIPPING AND RECEIVING CLERKS	1220	1.24	19.23
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	140	0.14	31.16
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	520	0.53	22.61
SERVICE OCCUPATIONS	1070	1.09	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	190	0.19	20.62
GUARDS AND WATCH GUARDS	270	0.27	16.92
FOOD,BEVERAGE PREPARATION AND SERVICE OCCUPATIONS	10	0.01	8.33
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	550	0.56	18.80
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	30	0.03	N/A
ALL OTHER SERVICE WORKERS	20	0.02	27.78
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	10	0.01	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	37990	38.65	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	410	0.42	27.38
MANAGER/SUPERS,CONSTR TRADES & EXTRACTIVE WORKERS	30	0.03	26.92
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	2260	2.30	14.04
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	100	0.10	31.96
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	200	0.20	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	1660	1.69	16.02
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	1510	1.54	17.74
MACHINERY MAINTENANCE MECHANICS	410	0.42	28.47
MACHINERY MAINTENANCE WORKERS	90	0.09	28.41
MAINTENANCE REPAIRERS, GENERAL UTILITY	590	0.60	38.33
DATA PROCESSING EQUIPMENT REPAIRERS	400	0.41	32.00
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	60	0.06	17.46
PRECISION INSTRUMENT REPAIRERS	90	0.09	36.96
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	640	0.65	N/A
CARPENTERS	90	0.09	23.08
ELECTRICIANS	210	0.21	22.82
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	70	0.07	35.29
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	110	0.11	N/A
TOOL AND DIE MAKERS	1370	1.39	38.59
MACHINISTS	5670	5.77	19.30

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MACHINERY, EXCEPT ELECTRICAL
SIC = 35
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	400	0.41	37.78
PRECISION LAYOUT WORKERS, METAL	40	0.04	41.03
SHEET METAL WORKERS	950	0.97	42.53
ALL OTHER PRECISION METAL WORKERS	190	0.19	38.02
ALL OTHER PRECISION WOODWORKERS	190	0.19	N/A
ALL OTHER PRECISION METAL WORKERS	80	0.08	N/A
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	130	0.13	46.27
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	1140	1.16	28.06
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	600	0.61	31.94
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	570	0.58	37.28
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	400	0.41	32.91
MACHINE TOOL CUTTING OPERATORS AND TENDERS	1050	1.07	39.71
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	40	0.04	37.84
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	100	0.10	42.42
FORGING MACHINE SETTERS AND SET-UP OPS, MET & PL	20	0.02	19.05
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	1500	1.53	44.24
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	1000	1.02	35.03
WELDING MACHINE OPERATORS AND TENDERS	160	0.16	25.81
SOLDERING, BRAZING MACH SETTERS, SET-UP OPERATOR	20	0.02	30.00
SOLDERING & BRAZING MACHINE OPERATORS AND TENDER	50	0.05	37.25
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	10	0.01	N/A
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	70	0.07	33.33
HEATING EQUIPMENT SETTERS, SET-UP OPS, MET & PLA	10	0.01	33.33
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	90	0.09	41.76
FURNACE OPERATORS AND TENDERS	10	0.01	37.50
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	590	0.60	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	420	0.43	N/A
ELECTRONIC SEMICONDUCTOR PROCESSORS	150	0.15	33.56
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	100	0.10	32.99
COATING, PAINTING,SPRAYING MCH OPERATORS,TENDER	240	0.24	47.50
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	60	0.06	6.67
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	30	0.03	38.46
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	210	0.21	47.83
ALL OTHER MACHINE OPERATORS AND TENDERS	180	0.18	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	1350	1.37	38.58
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	640	0.65	29.92
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	1690	1.72	20.20
ALL OTHER PRECISION ASSEMBLERS	250	0.25	37.14
MACHINE ASSEMBLERS	340	0.35	38.51
ELECTRICAL AND ELECTRONIC ASSEMBLERS	930	0.95	20.37
WELDERS AND CUTTERS	600	0.61	36.77

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MACHINERY, EXCEPT ELECTRICAL
SIC = 35
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	1620	1.65	36.90
ALL OTHER HAND WORKERS	830	0.84	N/A
PLANT AND SYSTEMS OCCUPATIONS	30	0.03	29.41
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	60	0.06	47.62
TRUCK DRIVERS,LIGHT INCL DELIVERY,ROUTE WORKERS	210	0.21	31.40
CRANE AND TOWER OPERATORS	10	0.01	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	130	0.13	42.06
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	20	0.02	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	90	0.09	41.18
MECHANIC AND REPAIRER HELPERS	60	0.06	42.11
MACHINE FEEDERS AND OFFBEARERS	50	0.05	35.19
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	500	0.51	31.54
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	1870	1.90	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METALWORKING MACHINERY
SIC = 354
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	13820	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1280	9.26	N/A
FINANCIAL MANAGERS	260	1.88	20.25
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.22	35.99
PURCHASING MANAGERS	60	0.43	16.07
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	90	0.65	28.34
ADMINISTRATIVE SERVICES MANAGERS	40	0.29	36.99
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	130	0.94	38.12
INDUSTRIAL PRODUCTION MANAGERS	150	1.09	17.91
GENERAL MANAGERS AND TOP EXECUTIVES	480	3.47	11.49
ALL OTHER MANAGERS AND ADMINISTRATORS	40	0.29	21.18
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1230	8.90	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	40	0.29	31.81
ALL OTHER FINANCIAL SPECIALISTS	20	0.14	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	100	0.72	32.52
COST ESTIMATORS	120	0.87	46.38
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	0.22	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.07	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	50	0.36	34.50
MECHANICAL ENGINEERS	200	1.45	23.91
ALL OTHER ENGINEERS	140	1.01	N/A
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.07	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	20	0.14	47.69
DRAFTERS	190	1.37	27.30
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	110	0.80	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.07	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.07	N/A
COMPUTER PROGRAMMERS	40	0.29	32.15
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	20	0.14	17.17
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	10	0.07	12.49
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	110	0.80	N/A
SALES AND RELATED OCCUPATIONS	510	3.69	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	50	0.36	36.39
SALES ENGINEERS	180	1.30	32.67
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	70	0.51	26.93

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METALWORKING MACHINERY
SIC = 354
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	110	0.80	34.93
ALL OTHER SALES AND RELATED WORKERS	100	0.72	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1670	12.08	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	270	1.95	18.42
ADJUSTMENT CLERKS	10	0.07	N/A
SECRETARIES	240	1.74	18.94
RECEPTIONISTS AND INFORMATION CLERKS	20	0.14	46.81
TYPISTS	20	0.14	35.05
FILE CLERKS	20	0.14	45.70
PROCUREMENT CLERKS	20	0.14	37.95
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	200	1.45	20.58
PAYROLL AND TIMEKEEPING CLERKS	30	0.22	32.25
GENERAL OFFICE CLERKS	120	0.87	34.59
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.29	30.37
DATA ENTRY KEYERS, EXCEPT COMPOSING	40	0.29	20.38
ALL OTHER OFFICE MACHINE OPERATORS	10	0.07	N/A
ALL OTHER COMMUNICATIONS EQUIPMENT OPERATORS	10	0.07	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	120	0.87	43.45
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.07	16.66
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	150	1.09	22.45
TRAFFIC, SHIPPING AND RECEIVING CLERKS	230	1.66	23.12
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.14	36.00
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	110	0.80	N/A
SERVICE OCCUPATIONS	160	1.16	N/A
ALL OTHER SERVICE SUPERVISORS	20	0.14	N/A
GUARDS AND WATCH GUARDS	20	0.14	5.55
FOOD,BEVERAGE PREPARATION AND SERVICE OCCUPATIONS	10	0.07	N/A
JANITORS & CLEANERS, EXCEPT MAIDS & HOUSE CLEANERS	100	0.72	23.47
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.07	N/A
ALL OTHER SERVICE WORKERS	*	N/A	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	8960	64.83	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METALWORKING MACHINERY
SIC = 354
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.07	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	430	3.11	16.42
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.07	43.03
PRECISION INSPECTORS, TESTERS AND GRADERS	210	1.52	30.89
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	60	0.43	38.63
MACHINERY MAINTENANCE MECHANICS	60	0.43	42.54
MILLWRIGHTS	10	0.07	27.95
MAINTENANCE REPAIRERS, GENERAL UTILITY	50	0.36	27.77
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	30	0.22	N/A
CARPENTERS	10	0.07	N/A
ELECTRICIANS	40	0.29	43.41
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.07	N/A
TOOL AND DIE MAKERS	880	6.37	40.73
MACHINISTS	1460	10.56	22.04
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	240	1.74	44.07
ALL OTHER PRECISION METAL WORKERS	410	2.97	N/A
ALL OTHER PRECISION WOODWORKERS	20	0.14	N/A
ALL OTHER PRECISION METAL WORKERS	20	0.14	N/A
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	40	0.29	37.78
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	250	1.81	31.66
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	150	1.09	37.25
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	220	1.59	25.07
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	150	1.09	40.75
MACHINE TOOL CUTTING OPERATORS AND TENDERS	540	3.91	22.27
FORGING MACHINE SETTERS AND SET-UP OPS, MET & PL	10	0.07	15.97
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	330	2.39	43.66
WELDING MACHINE OPERATORS AND TENDERS	20	0.14	8.69
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	10	0.07	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	40	0.29	31.92
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	170	1.23	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	390	2.82	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	50	0.36	N/A
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.07	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	60	0.43	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	30	0.22	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	380	2.75	49.03
ALL OTHER PRECISION ASSEMBLERS	290	2.10	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	100	0.72	27.55
GRINDING AND POLISHING WORKERS, HAND	90	0.65	36.00
ASSMBLRS,FABRICTRS,EXC MCH ELCTRC,ELCTRNC	120	0.87	43.68
ALL OTHER HAND WORKERS	160	1.16	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
METALWORKING MACHINERY
SIC = 354
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER MOTOR VEHICLE OPERATORS	40	0.29	N/A
CRANE AND TOWER OPERATORS	10	0.07	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.14	29.80
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.07	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	30	0.22	N/A
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	1300	9.41	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SPECIAL INDUSTRIAL MACHINERY
SIC = 355
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	12400	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1100	8.87	N/A
FINANCIAL MANAGERS	90	0.73	7.35
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.24	21.21
PURCHASING MANAGERS	20	0.16	26.89
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	210	1.69	4.36
ADMINISTRATIVE SERVICES MANAGERS	20	0.16	23.52
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	180	1.45	9.27
INDUSTRIAL PRODUCTION MANAGERS	180	1.45	20.55
GENERAL MANAGERS AND TOP EXECUTIVES	260	2.10	16.11
ALL OTHER MANAGERS AND ADMINISTRATORS	110	0.89	12.62
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	2330	18.79	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	70	0.56	9.91
BUDGET ANALYSTS	30	0.24	6.89
ALL OTHER FINANCIAL SPECIALISTS	10	0.08	39.96
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	90	0.73	11.80
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.16	9.52
COST ESTIMATORS	30	0.24	22.30
ALL OTHER MANAGEMENT SUPPORT WORKERS	70	0.56	19.57
CHEMICAL ENGINEERS	40	0.32	23.77
ELECTRICAL AND ELECTRONIC ENGINEERS	310	2.50	6.21
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	70	0.56	8.92
MECHANICAL ENGINEERS	300	2.42	11.94
ALL OTHER ENGINEERS	40	0.32	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	370	2.98	2.23
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	100	0.81	25.65
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	100	0.81	11.00
DRAFTERS	210	1.69	19.72
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	20	0.16	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	20	0.16	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	90	0.73	4.55
COMPUTER PROGRAMMERS	90	0.73	14.00
COMPUTER PROGRAMMER AIDES	10	0.08	45.45
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	30	0.24	32.73
WRITERS AND EDITORS	10	0.08	28.57
TECHNICAL WRITERS	30	0.24	26.24
DESIGNERS, EXCEPT INTERIOR DESIGNERS	110	0.89	27.97

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** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SPECIAL INDUSTRIAL MACHINERY
SIC = 355
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	70	0.56	N/A
SALES AND RELATED OCCUPATIONS	850	6.85	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	70	0.56	22.82
SALES ENGINEERS	140	1.13	28.06
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	250	2.02	5.44
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	160	1.29	15.29
ALL OTHER SALES AND RELATED WORKERS	230	1.85	8.94
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	2120	17.10	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	120	0.97	20.44
ADJUSTMENT CLERKS	30	0.24	7.14
SECRETARIES	220	1.77	12.74
STENOGRAPHERS	50	0.40	18.59
RECEPTIONISTS AND INFORMATION CLERKS	20	0.16	29.58
TYPISTS	50	0.40	13.99
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.16	24.47
FILE CLERKS	10	0.08	41.66
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	70	0.56	18.63
PROCUREMENT CLERKS	30	0.24	22.07
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	200	1.61	18.28
PAYROLL AND TIMEKEEPING CLERKS	40	0.32	14.30
BILLING, COST AND RATE CLERKS	50	0.40	20.20
GENERAL OFFICE CLERKS	240	1.94	15.30
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.32	17.49
DATA ENTRY KEYERS, EXCEPT COMPOSING	50	0.40	30.68
ALL OTHER OFFICE MACHINE OPERATORS	10	0.08	N/A
SWITCHBOARD OPERATORS	20	0.16	20.41
PRODUCTION, PLANNING AND EXPEDITING CLERKS	280	2.26	6.63
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	190	1.53	9.09
TRAFFIC, SHIPPING AND RECEIVING CLERKS	160	1.29	20.09
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	60	0.48	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	160	1.29	N/A
SERVICE OCCUPATIONS	160	1.29	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.16	13.33
GUARDS AND WATCH GUARDS	30	0.24	41.56
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	110	0.89	17.23

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SPECIAL INDUSTRIAL MACHINERY
SIC = 355
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SERVICE WORKERS	10	0.08	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5850	47.18	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	50	0.40	35.72
MANAGER/SUPERS,CONSTR TRADES & EXTRACTIVE WORKERS	10	0.08	N/A
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	340	2.74	16.10
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.16	38.72
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	120	0.97	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	160	1.29	16.32
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	100	0.81	13.59
MACHINERY MAINTENANCE MECHANICS	100	0.81	15.71
MACHINERY MAINTENANCE WORKERS	10	0.08	22.36
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.32	47.23
PRECISION INSTRUMENT REPAIRERS	10	0.08	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	420	3.39	N/A
CARPENTERS	20	0.16	48.10
ELECTRICIANS	40	0.32	28.92
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.08	39.99
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	30	0.24	N/A
TOOL AND DIE MAKERS	80	0.65	37.97
MACHINISTS	1040	8.39	19.42
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	50	0.40	24.09
SHEET METAL WORKERS	140	1.13	44.94
ALL OTHER PRECISION METAL WORKERS	40	0.32	N/A
PATTERN AND MODEL MAKERS, WOOD	20	0.16	46.14
ALL OTHER PRECISION METAL WORKERS	50	0.40	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	260	2.10	17.19
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	220	1.77	23.19
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	100	0.81	21.91
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	100	0.81	37.38
MACHINE TOOL CUTTING OPERATORS AND TENDERS	120	0.97	49.50
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	50	0.40	37.01
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	170	1.37	49.94
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	100	0.81	28.10
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	10	0.08	N/A
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	160	1.29	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
SPECIAL INDUSTRIAL MACHINERY
SIC = 355
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	60	0.48	N/A
COATING, PAINTING, SPRAYING MCH SETTRS,SET-UP	20	0.16	10.64
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	40	0.32	30.23
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	40	0.32	33.64
ALL OTHER MACHINE OPERATORS AND TENDERS	50	0.40	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	250	2.02	25.55
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	100	0.81	N/A
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	200	1.61	9.12
ALL OTHER PRECISION ASSEMBLERS	40	0.32	N/A
MACHINE ASSEMBLERS	140	1.13	37.25
ELECTRICAL AND ELECTRONIC ASSEMBLERS	100	0.81	32.78
WELDERS AND CUTTERS	170	1.37	44.60
GRINDING AND POLISHING WORKERS, HAND	20	0.16	42.15
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	180	1.45	33.84
ALL OTHER HAND WORKERS	10	0.08	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.08	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.08	31.49
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	60	0.48	39.16
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.16	41.51
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.08	N/A
MACHINE FEEDERS AND OFFBEARERS	30	0.24	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	100	0.81	30.57
HAND PACKERS AND PACKAGERS	20	0.16	10.64
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.08	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
GENERAL INDUSTRIAL MACHINERY
SIC = 356
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	8130	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	830	10.21	N/A
FINANCIAL MANAGERS	90	1.11	11.74
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	30	0.37	16.76
PURCHASING MANAGERS	20	0.25	20.75
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	130	1.60	6.15
ADMINISTRATIVE SERVICES MANAGERS	30	0.37	8.74
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	130	1.60	15.69
INDUSTRIAL PRODUCTION MANAGERS	110	1.35	10.11
GENERAL MANAGERS AND TOP EXECUTIVES	250	3.08	17.39
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.62	10.41
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1410	17.34	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	90	1.11	16.32
BUDGET ANALYSTS	10	0.12	44.72
ALL OTHER FINANCIAL SPECIALISTS	20	0.25	47.43
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	70	0.86	13.21
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	30	0.37	20.00
COST ESTIMATORS	30	0.37	26.76
ALL OTHER MANAGEMENT SUPPORT WORKERS	70	0.86	31.58
CHEMICAL ENGINEERS	50	0.62	15.36
ELECTRICAL AND ELECTRONIC ENGINEERS	70	0.86	29.76
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	40	0.49	17.84
MECHANICAL ENGINEERS	240	2.95	8.33
ALL OTHER ENGINEERS	50	0.62	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	10	0.12	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	120	1.48	48.75
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	100	1.23	5.20
DRAFTERS	160	1.97	31.88
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	90	1.11	N/A
PHYSICAL SCIENTISTS	10	0.12	N/A
LIFE SCIENTISTS	20	0.25	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.12	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	50	0.62	7.35
COMPUTER PROGRAMMERS	10	0.12	N/A
COMPUTER PROGRAMMER AIDES	20	0.25	13.15
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.12	36.85
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	10	0.12	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
GENERAL INDUSTRIAL MACHINERY
SIC = 356
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TECHNICAL WRITERS	20	0.25	24.94
DESIGNERS, EXCEPT INTERIOR DESIGNERS	30	0.37	9.07
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.25	N/A
SALES AND RELATED OCCUPATIONS	370	4.55	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	60	0.74	17.25
SALES ENGINEERS	110	1.35	36.25
SALES REPS,SCIENTIFIC PROD & SVCS EXC RETAIL	130	1.60	10.10
ALL OTHER SALES AND RELATED WORKERS	70	0.86	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1160	14.27	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	60	0.74	21.68
ADJUSTMENT CLERKS	60	0.74	N/A
SECRETARIES	270	3.32	11.23
RECEPTIONISTS AND INFORMATION CLERKS	20	0.25	38.09
TYPISTS	20	0.25	24.47
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.12	48.98
FILE CLERKS	10	0.12	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	90	1.11	10.66
PROCUREMENT CLERKS	20	0.25	33.39
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	100	1.23	26.74
PAYROLL AND TIMEKEEPING CLERKS	10	0.12	25.75
BILLING, COST AND RATE CLERKS	10	0.12	42.82
GENERAL OFFICE CLERKS	40	0.49	14.80
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.25	24.74
DATA ENTRY KEYERS, EXCEPT COMPOSING	40	0.49	14.04
SWITCHBOARD OPERATORS	20	0.25	18.42
PRODUCTION, PLANNING AND EXPEDITING CLERKS	80	0.98	26.00
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	110	1.35	27.99
TRAFFIC, SHIPPING AND RECEIVING CLERKS	130	1.60	13.35
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.12	24.49
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.37	N/A
SERVICE OCCUPATIONS	80	0.98	N/A
ALL OTHER SERVICE SUPERVISORS	10	0.12	N/A
GUARDS AND WATCH GUARDS	20	0.25	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	60	0.74	19.49
ALL OTHER SERVICE WORKERS	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
GENERAL INDUSTRIAL MACHINERY
SIC = 356
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	4280	52.64	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	30	0.37	32.62
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	250	3.08	13.62
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.12	27.21
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.12	37.26
PRECISION INSPECTORS, TESTERS AND GRADERS	140	1.72	21.06
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	70	0.86	25.57
MACHINERY MAINTENANCE MECHANICS	60	0.74	27.08
MACHINERY MAINTENANCE WORKERS	40	0.49	6.21
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.49	36.64
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	50	0.62	N/A
ELECTRICIANS	20	0.25	29.15
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.12	34.01
PLUMBERS,PIPEFITTERS AND STEAMFITTERS	40	0.49	43.69
A O CONSTRUCTION,EXTRACTIVE WORKERS,EXC HELPER	30	0.37	N/A
TOOL AND DIE MAKERS	90	1.11	23.72
MACHINISTS	640	7.87	28.15
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	30	0.37	45.65
ALL OTHER PRECISION METAL WORKERS	90	1.11	N/A
ALL OTHER PRECISION WOODWORKERS	120	1.48	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	200	2.46	27.55
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	70	0.86	45.18
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	40	0.49	42.72
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	40	0.49	24.97
MACHINE TOOL CUTTING OPERATORS AND TENDERS	80	0.98	44.15
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	20	0.25	41.94
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	560	6.89	47.65
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	130	1.60	41.11
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	20	0.25	36.40
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	110	1.35	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	40	0.49	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.25	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	50	0.62	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	60	0.74	43.47
ALL OTHER PRECISION ASSEMBLERS	190	2.34	N/A
MACHINE ASSEMBLERS	20	0.25	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	50	0.62	10.40
WELDERS AND CUTTERS	80	0.98	38.62
ASSMBLRS,FABRICTRS,EXC MCH ELCTRC,ELCTRNC	540	6.64	44.73

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OCCUPATIONS OF EMPLOYEES
GENERAL INDUSTRIAL MACHINERY
SIC = 356
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER HAND WORKERS	50	0.62	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.12	44.72
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.12	46.35
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.12	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.12	15.97
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	40	0.49	N/A
HAND PACKERS AND PACKAGERS	30	0.37	42.23
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.12	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.12	N/A

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OCCUPATIONS OF EMPLOYEES
OFFICE AND COMPUTING MACHINES
SIC = 357
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	48780	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	6280	12.87	N/A
FINANCIAL MANAGERS	670	1.37	9.63
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	340	0.70	8.93
PURCHASING MANAGERS	140	0.29	12.26
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	700	1.44	10.03
ADMINISTRATIVE SERVICES MANAGERS	250	0.51	11.56
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	1370	2.81	9.77
INDUSTRIAL PRODUCTION MANAGERS	990	2.03	14.47
GENERAL MANAGERS AND TOP EXECUTIVES	680	1.39	9.02
ALL OTHER MANAGERS AND ADMINISTRATORS	1140	2.34	26.34
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	19180	39.32	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	640	1.31	12.63
BUDGET ANALYSTS	250	0.51	16.32
ALL OTHER FINANCIAL SPECIALISTS	500	1.03	21.56
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	430	0.88	8.79
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	460	0.94	8.74
COST ESTIMATORS	130	0.27	20.87
ALL OTHER MANAGEMENT SUPPORT WORKERS	1380	2.83	20.74
ELECTRICAL AND ELECTRONIC ENGINEERS	5540	11.36	9.05
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	650	1.33	16.21
MECHANICAL ENGINEERS	410	0.84	15.42
ALL OTHER ENGINEERS	470	0.96	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	2330	4.78	13.48
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	80	0.16	21.60
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	250	0.51	16.03
DRAFTERS	330	0.68	11.99
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	820	1.68	15.75
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.02	44.72
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	1290	2.64	11.92
COMPUTER PROGRAMMERS	1390	2.85	29.16
COMPUTER PROGRAMMER AIDES	80	0.16	21.73
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	40	0.08	27.99
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	90	0.18	30.71
MATHEMATICAL SCIENTISTS	10	0.02	38.18
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	40	0.08	12.24
WRITERS AND EDITORS	170	0.35	15.23

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OCCUPATIONS OF EMPLOYEES
OFFICE AND COMPUTING MACHINES
SIC = 357
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TECHNICAL WRITERS	520	1.07	13.85
DESIGNERS, EXCEPT INTERIOR DESIGNERS	90	0.18	18.97
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	790	1.62	N/A
SALES AND RELATED OCCUPATIONS	4320	8.86	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	640	1.31	11.47
SALES ENGINEERS	550	1.13	20.60
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	2090	4.28	17.76
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	180	0.37	33.82
ALL OTHER SALES AND RELATED WORKERS	860	1.76	28.28
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	8330	17.08	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	1060	2.17	23.25
ADJUSTMENT CLERKS	150	0.31	21.44
SECRETARIES	2180	4.47	6.18
RECEPTIONISTS AND INFORMATION CLERKS	110	0.23	16.78
TYPISTS	120	0.25	19.80
TYPISTS, WORD PROCESSING EQUIPMENT	120	0.25	30.56
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	140	0.29	18.43
FILE CLERKS	40	0.08	46.51
ORDER CLERKS - MATERIALS,MERCHANDISE,SERVICE	170	0.35	20.61
PROCUREMENT CLERKS	80	0.16	14.63
STATISTICAL CLERKS	30	0.06	21.41
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	510	1.05	8.90
PAYROLL AND TIMEKEEPING CLERKS	60	0.12	14.33
BILLING, COST AND RATE CLERKS	90	0.18	19.97
GENERAL OFFICE CLERKS	280	0.57	13.02
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	410	0.84	10.28
DATA ENTRY KEYERS, EXCEPT COMPOSING	250	0.51	13.99
ALL OTHER OFFICE MACHINE OPERATORS	50	0.10	N/A
SWITCHBOARD OPERATORS	120	0.25	13.42
PRODUCTION, PLANNING AND EXPEDITING CLERKS	910	1.87	11.27
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	50	0.10	28.27
STOCK CLERKS- STOCKROOM,WAREHOUSE,STORAGE YARD	580	1.19	11.69
TRAFFIC, SHIPPING AND RECEIVING CLERKS	440	0.90	11.29
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	50	0.10	26.07
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	350	0.72	24.23
SERVICE OCCUPATIONS	570	1.17	N/A

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OCCUPATIONS OF EMPLOYEES
OFFICE AND COMPUTING MACHINES
SIC = 357
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	130	0.27	10.62
GUARDS AND WATCH GUARDS	200	0.41	16.70
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	210	0.43	11.80
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	20	0.04	36.08
ALL OTHER SERVICE WORKERS	20	0.04	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A O AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	10100	20.71	N/A
1ST LINE SUPERS - MECHANICS, INSTALLERS, REPAIRER	290	0.59	23.38
MANAGER/SUPERS, CONSTR TRADES & EXTRACTIVE WORKER	20	0.04	27.24
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	770	1.58	11.47
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	50	0.10	19.49
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	50	0.10	29.14
PRECISION INSPECTORS, TESTERS AND GRADERS	840	1.72	11.27
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	1070	2.19	14.27
MACHINERY MAINTENANCE MECHANICS	130	0.27	27.87
MACHINERY MAINTENANCE WORKERS	10	0.02	20.20
MAINTENANCE REPAIRERS, GENERAL UTILITY	230	0.47	21.21
DATA PROCESSING EQUIPMENT REPAIRERS	400	0.82	31.89
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	40	0.08	11.45
PRECISION INSTRUMENT REPAIRERS	80	0.16	44.38
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	130	0.27	N/A
CARPENTERS	30	0.06	19.06
ELECTRICIANS	90	0.18	13.10
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.02	45.45
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.02	31.49
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.02	47.14
TOOL AND DIE MAKERS	60	0.12	30.73
MACHINISTS	150	0.31	29.04
SHEET METAL WORKERS	140	0.29	34.19
ALL OTHER PRECISION METAL WORKERS	50	0.10	N/A
ALL OTHER PRECISION WOODWORKERS	10	0.02	44.44
ALL OTHER PRECISION METAL WORKERS	20	0.04	N/A
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	10	0.02	15.71
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	10	0.02	47.14
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	50	0.10	21.77

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OCCUPATIONS OF EMPLOYEES
OFFICE AND COMPUTING MACHINES
SIC = 357
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	120	0.25	49.47
WELDING MACHINE OPERATORS AND TENDERS	80	0.16	27.27
SOLDERINC, BRAZING MACH SETTERS, SET-UP OPERATOR	10	0.02	37.11
SOLDERING & BRAZING MACHINE OPERATORS AND TENDER	40	0.08	31.40
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	50	0.10	48.12
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	60	0.12	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.02	N/A
ELECTRONIC SEMICONDUCTOR PROCESSORS	150	0.31	34.39
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	40	0.08	37.42
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	10	0.02	46.77
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.02	14.28
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	120	0.25	40.94
ALL OTHER MACHINE OPERATORS AND TENDERS	220	0.45	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	80	0.16	34.01
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	360	0.74	27.68
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	1350	2.77	17.21
ALL OTHER PRECISION ASSEMBLERS	30	0.06	24.86
ELECTRICAL AND ELECTRONIC ASSEMBLERS	670	1.37	18.08
COIL WINDERS, TAPERS, AND FINISHERS	40	0.08	19.99
WELDERS AND CUTTERS	50	0.10	48.72
SOLDERERS AND BRAZERS	140	0.29	49.48
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	500	1.03	37.53
ALL OTHER HAND WORKERS	230	0.47	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.02	39.97
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	0.04	32.86
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	60	0.12	11.89
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.06	42.42
CONVEYOR OPERATORS AND TENDERS	10	0.02	45.06
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	70	0.14	37.62
MECHANIC AND REPAIRER HELPERS	50	0.10	35.47
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	290	0.59	19.62
HAND PACKERS AND PACKAGERS	40	0.08	31.30
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	440	0.90	N/A

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N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
REFRIGERATION AND SERVICE MACHINERY
SIC = 358
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	2270	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	200	8.81	N/A
FINANCIAL MANAGERS	30	1.32	10.58
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.44	17.67
PURCHASING MANAGERS	10	0.44	10.10
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	40	1.76	9.86
ADMINISTRATIVE SERVICES MANAGERS	10	0.44	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.88	10.64
INDUSTRIAL PRODUCTION MANAGERS	40	1.76	7.71
GENERAL MANAGERS AND TOP EXECUTIVES	30	1.32	8.26
ALL OTHER MANAGERS AND ADMINISTRATORS	*	N/A	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	260	11.45	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.44	14.43
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.88	8.69
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.44	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.44	39.99
CHEMICAL ENGINEERS	20	0.88	36.57
AGRICULTURAL ENGINEERS	10	0.44	47.14
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.88	4.99
MECHANICAL ENGINEERS	50	2.20	11.43
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	10	0.44	33.07
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.44	16.66
DRAFTERS	30	1.32	21.06
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.44	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	10	0.44	49.48
COMPUTER PROGRAMMERS	10	0.44	N/A
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.44	7.69
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.44	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.44	N/A
SALES AND RELATED OCCUPATIONS	100	4.41	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	1.32	9.07
SALES ENGINEERS	40	1.76	23.90
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	0.88	26.02
ALL OTHER SALES AND RELATED WORKERS	20	0.88	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
REFRIGERATION AND SERVICE MACHINERY
SIC = 358
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	360	15.86	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	30	1.32	17.12
ADJUSTMENT CLERKS	20	0.88	13.60
SECRETARIES	60	2.64	4.56
TYPISTS	10	0.44	23.57
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.44	19.99
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.44	28.28
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.44	24.32
PROCUREMENT CLERKS	10	0.44	24.74
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	50	2.20	9.68
PAYROLL AND TIMEKEEPING CLERKS	10	0.44	20.20
GENERAL OFFICE CLERKS	10	0.44	14.43
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.44	42.42
ALL OTHER OFFICE MACHINE OPERATORS	10	0.44	N/A
SWITCHBOARD OPERATORS	10	0.44	14.14
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	1.32	6.45
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	50	2.20	9.38
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	1.76	7.34
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	10	0.44	N/A
SERVICE OCCUPATIONS	20	0.88	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.44	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	10	0.44	26.64
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1320	58.15	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRER	10	0.44	34.40
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	90	3.96	8.55
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.44	37.26
PRECISION INSPECTORS, TESTERS AND GRADERS	30	1.32	8.01
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	1.76	9.21
MACHINERY MAINTENANCE MECHANICS	10	0.44	37.50
MACHINERY MAINTENANCE WORKERS	10	0.44	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.88	11.78
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	20	0.88	36.97
PRECISION INSTRUMENT REPAIRERS	10	0.44	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	30	1.32	N/A
CARPENTERS	20	0.88	20.20

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
REFRIGERATION AND SERVICE MACHINERY
SIC = 358
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ELECTRICIANS	10	0.44	11.11
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.44	47.38
TOOL AND DIE MAKERS	20	0.88	8.24
MACHINISTS	10	0.44	31.18
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	30	1.32	N/A
SHEET METAL WORKERS	140	6.17	25.45
ALL OTHER PRECISION METAL WORKERS	20	0.88	N/A
PATTERN AND MODEL MAKERS, WOOD	10	0.44	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	50	2.20	10.19
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	10	0.44	42.42
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	60	2.64	3.38
MACHINE TOOL CUTTING OPERATORS AND TENDERS	70	3.08	9.36
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	20	0.88	32.01
FORGING MACHINE SETTERS AND SET-UP OPS, MET & PL	10	0.44	40.82
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	30	1.32	N/A
WELDING MACHINE SETTERS AND SET-UP OPERATORS	30	1.32	43.17
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	10	0.44	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	10	0.44	N/A
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	10	0.44	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	0.88	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	20	0.88	18.85
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	60	2.64	32.99
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	10	0.44	42.64
MACHINE ASSEMBLERS	80	3.52	18.58
WELDERS AND CUTTERS	50	2.20	29.32
SOLDERERS AND BRAZERS	10	0.44	43.59
GRINDING AND POLISHING WORKERS, HAND	10	0.44	36.05
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	130	5.73	13.69
ALL OTHER HAND WORKERS	10	0.44	N/A
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.44	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.44	40.40
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	0.88	15.06
HAND PACKERS AND PACKAGERS	10	0.44	29.79
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	20	0.88	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL
SIC = 359
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	8020	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1120	13.97	N/A
FINANCIAL MANAGERS	210	2.62	25.01
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.12	N/A
PURCHASING MANAGERS	20	0.25	31.97
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.12	33.07
ADMINISTRATIVE SERVICES MANAGERS	10	0.12	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	90	1.12	12.05
INDUSTRIAL PRODUCTION MANAGERS	110	1.37	26.49
GENERAL MANAGERS AND TOP EXECUTIVES	620	7.73	10.91
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.62	16.98
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	470	5.86	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.25	45.56
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	50	0.62	22.53
COST ESTIMATORS	40	0.50	45.75
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.25	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	20	0.25	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.25	43.39
MECHANICAL ENGINEERS	120	1.50	9.97
ALL OTHER ENGINEERS	10	0.12	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	20	0.25	N/A
DRAFTERS	50	0.62	9.99
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.37	N/A
COMPUTER PROGRAMMERS	50	0.62	41.53
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.12	47.14
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.25	N/A
SALES AND RELATED OCCUPATIONS	160	2.00	N/A
SALES ENGINEERS	40	0.50	31.91
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	30	0.37	42.92
ALL OTHER SALES AND RELATED WORKERS	80	1.00	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	980	12.22	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	90	1.12	22.52
SECRETARIES	180	2.24	21.45

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL
SIC = 359
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
RECEPTIONISTS AND INFORMATION CLERKS	10	0.12	34.64
TYPISTS	10	0.12	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	240	2.99	18.58
PAYROLL AND TIMEKEEPING CLERKS	10	0.12	34.64
BILLING, COST AND RATE CLERKS	10	0.12	19.99
GENERAL OFFICE CLERKS	250	3.12	23.25
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.12	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	0.37	22.34
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.25	36.05
TRAFFIC, SHIPPING AND RECEIVING CLERKS	100	1.25	22.68
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.50	N/A
SERVICE OCCUPATIONS	40	0.50	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	30	0.37	43.62
ALL OTHER SERVICE WORKERS	10	0.12	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5260	65.59	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	260	3.24	15.50
PRECISION INSPECTORS, TESTERS AND GRADERS	210	2.62	18.73
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	0.50	27.25
ALL OTHER MACHINERY MAINTENANCE MECHANICS	20	0.25	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	170	2.12	N/A
ELECTRICIANS	10	0.12	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.12	N/A
TOOL AND DIE MAKERS	210	2.62	42.44
MACHINISTS	2190	27.31	12.94
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	20	0.25	23.53
SHEET METAL WORKERS	20	0.25	42.05
ALL OTHER PRECISION METAL WORKERS	20	0.25	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	250	3.12	28.49
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	130	1.62	26.10
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	130	1.62	45.35
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	50	0.62	41.63
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	380	4.74	33.35
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	360	4.49	25.71
WELDING MACHINE OPERATORS AND TENDERS	30	0.37	14.84
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	10	0.12	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	10	0.12	39.99
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	120	1.50	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - RELATIVE ERROR NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL
SIC = 359
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
RECEPTIONISTS AND INFORMATION CLERKS	10	0.12	34.64
TYPISTS	10	0.12	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	240	2.99	18.58
PAYROLL AND TIMEKEEPING CLERKS	10	0.12	34.64
BILLING, COST AND RATE CLERKS	10	0.12	19.99
GENERAL OFFICE CLERKS	250	3.12	23.25
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.12	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	0.37	22.34
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	20	0.25	36.05
TRAFFIC, SHIPPING AND RECEIVING CLERKS	100	1.25	22.68
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.50	N/A
SERVICE OCCUPATIONS	40	0.50	N/A
JANITORS & CLEANERS,EXC. MAIDS & HOUSE CLEANERS	30	0.37	43.62
ALL OTHER SERVICE WORKERS	10	0.12	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5260	65.59	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	260	3.24	15.50
PRECISION INSPECTORS, TESTERS AND GRADERS	210	2.62	18.73
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	40	0.50	27.25
ALL OTHER MACHINERY MAINTENANCE MECHANICS	20	0.25	N/A
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	170	2.12	N/A
ELECTRICIANS	10	0.12	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.12	N/A
TOOL AND DIE MAKERS	210	2.62	42.44
MACHINISTS	2190	27.31	12.94
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	20	0.25	23.53
SHEET METAL WORKERS	20	0.25	42.05
ALL OTHER PRECISION METAL WORKERS	20	0.25	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	250	3.12	28.49
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	130	1.62	26.10
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	130	1.62	45.35
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	50	0.62	41.63
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	380	4.74	33.35
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	360	4.49	25.71
WELDING MACHINE OPERATORS AND TENDERS	30	0.37	14.84
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	10	0.12	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	10	0.12	39.99
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	120	1.50	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL
SIC = 359
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	200	2.49	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.12	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	10	0.12	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	10	0.12	24.99
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.12	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	10	0.12	N/A
ALL OTHER PRECISION ASSEMBLERS	50	0.62	N/A
WELDERS AND CUTTERS	20	0.25	27.00
GRINDING AND POLISHING WORKERS, HAND	160	2.00	49.73
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	60	0.75	30.61
ALL OTHER HAND WORKERS	20	0.25	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	30	0.37	31.97
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.12	N/A
ALL OTHER HELPERS, LABORERS, MOVERS - HAND	20	0.25	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.12	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

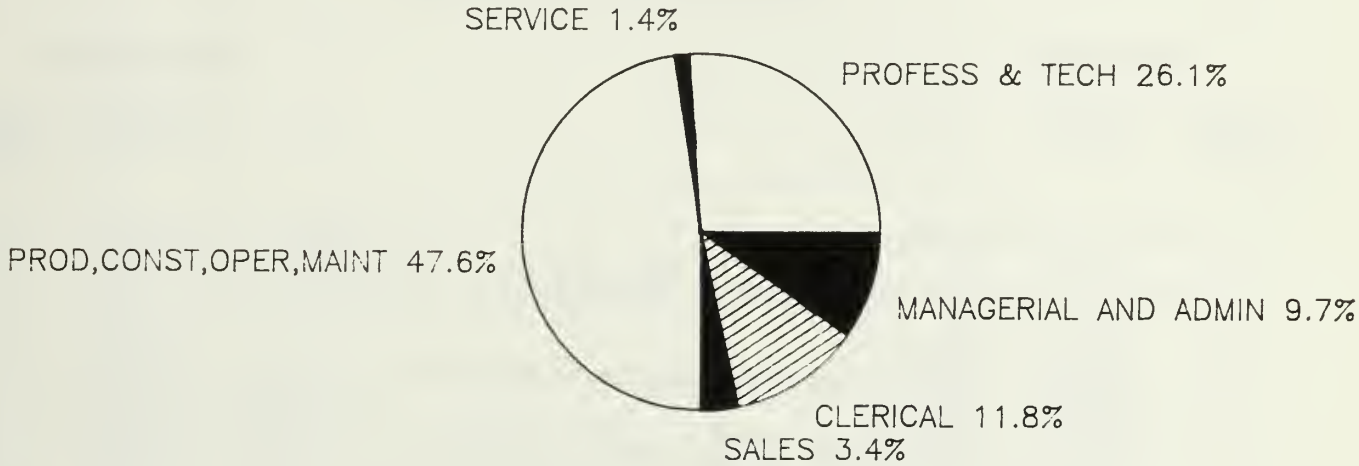
Electrical Equipment and Supplies

SIC 36

This major group includes establishments engaged in manufacturing machinery, apparatus and supplies for the generation, storage, transmission, transformation and utilization of electrical energy.

The electrical equipment and supplies industry, grew by 9,500 jobs or 9.7 percent over the 1983-1986 time frame. Production and maintenance workers comprise nearly 57,000 or 48 percent of this industry's workforce. Professional, paraprofessional and technical occupations comprise over 31,000 workers or 26 percent of this industry's jobs. Within the professional category, electrical and electronic engineers number 8,700 or 28 percent making this occupation the largest in the professional category. In the production and maintenance category, electrical and electronic assemblers constitute the largest single occupational representation at 6,400 workers or 11 percent of the production and maintenance category.

ELECTRIC AND ELECTRONIC EQUIPMENT (SIC-36)
DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Electrical and Electronic Engineers	8680
2.	All Other Helpers, Laborers, Material Movers	7510
3.	Electrical and Electronic Assemblers	6350
4.	Assemblers, Fabricators, Except Machine Electrical, Electronic	5510
5.	Electrical, Electronic Equipment Assemblers	5460
6.	Electrical, Electronic Engineering Technicians and Technologists	3900
7.	Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers	3840
8.	Secretaries	3470
9.	Engineering, Mathematical, Materials Science Managers	3100
10.	First Line Supervisors - Production, Operating Workers	3070

OCCUPATIONS OF EMPLOYEES
ELECTRIC AND ELECTRONIC EQUIPMENT
SIC = 36
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	119370	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	11550	9.68	N/A
FINANCIAL MANAGERS	1130	0.95	8.02
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	620	0.52	13.09
PURCHASING MANAGERS	390	0.33	15.03
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	1050	0.88	14.34
ADMINISTRATIVE SERVICES MANAGERS	340	0.28	18.58
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	3100	2.60	8.22
INDUSTRIAL PRODUCTION MANAGERS	2490	2.09	9.24
GENERAL MANAGERS AND TOP EXECUTIVES	1370	1.15	12.43
ALL OTHER MANAGERS AND ADMINISTRATORS	1050	0.88	29.89
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	31220	26.15	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	1040	0.87	9.16
BUDGET ANALYSTS	510	0.43	12.06
ALL OTHER FINANCIAL SPECIALISTS	140	0.12	36.03
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	850	0.71	14.72
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	930	0.78	17.38
COST ESTIMATORS	260	0.22	31.76
ALL OTHER MANAGEMENT SUPPORT WORKERS	2990	2.50	19.15
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	60	0.05	17.54
CHEMICAL ENGINEERS	180	0.15	42.05
ELECTRICAL AND ELECTRONIC ENGINEERS	8680	7.27	10.73
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	1530	1.28	17.66
SAFETY ENGINEERS, EXCEPT MINING	60	0.05	41.82
MECHANICAL ENGINEERS	1270	1.06	15.35
ALL OTHER ENGINEERS	990	0.83	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	20	0.02	21.05
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	3900	3.27	10.22
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	590	0.49	25.51
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	430	0.36	18.98
DRAFTERS	1200	1.01	13.31
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	790	0.66	18.22
PHYSICISTS AND ASTRONOMERS	20	0.02	18.75
ALL OTHER PHYSICAL SCIENTISTS	40	0.03	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	180	0.15	47.43
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	2410	2.02	13.11
COMPUTER PROGRAMMERS	580	0.49	21.74

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRIC AND ELECTRONIC EQUIPMENT
SIC = 36
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT 1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
COMPUTER PROGRAMMER AIDES	90	0.08	34.88
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	60	0.05	31.67
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	70	0.06	27.14
MATHEMATICAL SCIENTISTS	20	0.02	43.48
LAWYERS	60	0.05	9.84
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	100	0.08	6.06
WRITERS AND EDITORS	120	0.10	21.95
TECHNICAL WRITERS	260	0.22	23.14
DESIGNERS, EXCEPT INTERIOR DESIGNERS	190	0.16	32.98
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	640	0.54	N/A
SALES AND RELATED OCCUPATIONS	4100	3.43	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	680	0.57	17.45
SALES ENGINEERS	1020	0.85	41.24
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	1410	1.18	16.92
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	270	0.23	38.38
ALL OTHER SALES AND RELATED WORKERS	730	0.61	16.83
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	14050	11.77	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	610	0.51	13.19
ADJUSTMENT CLERKS	400	0.34	17.04
SECRETARIES	3470	2.91	8.86
STENOGRAPHERS	20	0.02	31.58
RECEPTIONISTS AND INFORMATION CLERKS	170	0.14	24.26
TYPISTS	320	0.27	21.56
TYPISTS, WORD PROCESSING EQUIPMENT	100	0.08	44.90
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	200	0.17	25.00
FILE CLERKS	70	0.06	25.68
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	280	0.23	23.32
PROCUREMENT CLERKS	210	0.18	18.01
STATISTICAL CLERKS	30	0.03	20.00
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	1340	1.12	10.45
PAYROLL AND TIMEKEEPING CLERKS	210	0.18	18.84
BILLING, COST AND RATE CLERKS	150	0.13	23.03
GENERAL OFFICE CLERKS	730	0.61	22.75
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	580	0.49	9.43
PERIPHERAL EDP EQUIPMENT OPERATORS	40	0.03	25.58
DATA ENTRY KEYERS, EXCEPT COMPOSING	310	0.26	14.19
ALL OTHER OFFICE MACHINE OPERATORS	50	0.04	18.52

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRIC AND ELECTRONIC EQUIPMENT
SIC = 36
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SWITCHBOARD OPERATORS	200	0.17	17.24
PRODUCTION, PLANNING AND EXPEDITING CLERKS	1720	1.44	9.99
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	30	0.03	28.00
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	1030	0.86	12.09
TRAFFIC, SHIPPING AND RECEIVING CLERKS	950	0.80	13.97
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	120	0.10	23.93
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	700	0.59	43.43
SERVICE OCCUPATIONS	1630	1.37	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	180	0.15	32.00
GUARDS AND WATCH GUARDS	600	0.50	16.58
FOOD,BEVERAGE PREPARATION AND SERVICE OCCUPATION	40	0.03	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	770	0.65	20.34
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	30	0.03	32.35
ALL OTHER SERVICE WORKERS	20	0.02	18.75
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	10	0.01	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	56820	47.60	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	250	0.21	25.30
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	3070	2.57	9.27
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	80	0.07	21.05
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	180	0.15	30.00
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	150	0.13	40.79
PRECISION INSPECTORS, TESTERS AND GRADERS	2280	1.91	14.46
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	3840	3.22	18.78
MACHINERY MAINTENANCE MECHANICS	550	0.46	15.54
MILLWRIGHTS	100	0.08	19.19
MACHINERY MAINTENANCE WORKERS	20	0.02	28.57
MAINTENANCE REPAIRERS, GENERAL UTILITY	570	0.48	24.69
DATA PROCESSING EQUIPMENT REPAIRERS	10	0.01	10.00
ELECTRONIC HOME ENTERTAINMENT EQUIPMENT REPAIRER	70	0.06	2.78
ELECTRONICS REPAIRERS, COMMERCIAL, IND EQUIPMENT	110	0.09	27.43
A O ELECTRONIC AND ELECTRICAL EQUIPMENT MECHANIC	10	0.01	N/A
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	60	0.05	14.55
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	880	0.74	N/A
CARPENTERS	70	0.06	15.94
ELECTRICIANS	280	0.23	15.00

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRIC AND ELECTRONIC EQUIPMENT
SIC = 36
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	40	0.03	20.45
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	110	0.09	29.73
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	40	0.03	29.73
TOOL AND DIE MAKERS	720	0.60	14.97
MACHINISTS	1310	1.10	29.51
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	50	0.04	43.75
SHEET METAL WORKERS	240	0.20	31.78
ALL OTHER PRECISION METAL WORKERS	70	0.06	N/A
ALL OTHER PRECISION METAL WORKERS	30	0.03	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	150	0.13	46.05
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	280	0.23	36.40
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	140	0.12	20.42
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	1080	0.90	20.74
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	480	0.40	42.24
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	60	0.05	27.42
WELDING MACHINE SETTERS AND SET-UP OPERATORS	80	0.07	41.46
WELDING MACHINE OPERATORS AND TENDERS	180	0.15	33.71
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	70	0.06	45.21
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	250	0.21	28.97
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	70	0.06	36.92
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	630	0.53	29.97
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	200	0.17	44.34
FURNACE OPERATORS AND TENDERS	90	0.08	37.36
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	1230	1.03	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	1420	1.19	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	30	0.03	48.48
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	160	0.13	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	30	0.03	13.79
ELECTRONIC SEMICONDUCTOR PROCESSORS	1370	1.15	32.70
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	160	0.13	35.48
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDERS	130	0.11	27.27
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	110	0.09	47.27
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	120	0.10	49.59
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	120	0.10	46.09
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	250	0.21	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	1120	0.94	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	180	0.15	33.89
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	2290	1.92	29.01
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	5460	4.57	22.88
ALL OTHER PRECISION ASSEMBLERS	50	0.04	19.15
ELECTRICAL AND ELECTRONIC ASSEMBLERS	6350	5.32	23.95

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRIC AND ELECTRONIC EQUIPMENT
SIC = 36
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
COIL WINDERS, TAPERS, AND FINISHERS	430	0.36	47.32
WELDERS AND CUTTERS	270	0.23	36.84
SOLDERERS AND BRAZERS	500	0.42	38.03
GRINDING AND POLISHING WORKERS, HAND	130	0.11	47.76
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	5510	4.62	15.47
ALL OTHER HAND WORKERS	1290	1.08	N/A
PLANT AND SYSTEMS OCCUPATIONS	80	0.07	42.67
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	60	0.05	13.56
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	130	0.11	20.93
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	60	0.05	20.34
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	20	0.02	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	40	0.03	37.21
MACHINE FEEDERS AND OFFBEARERS	220	0.18	49.78
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	630	0.53	29.30
HAND PACKERS AND PACKAGERS	460	0.39	43.30
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	7510	6.29	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRICAL INDUSTRIAL APPARATUS
SIC = 362
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	7240	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	310	4.28	N/A
FINANCIAL MANAGERS	30	0.41	9.67
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.14	N/A
PURCHASING MANAGERS	10	0.14	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	40	0.55	9.03
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	60	0.83	14.48
INDUSTRIAL PRODUCTION MANAGERS	60	0.83	6.45
GENERAL MANAGERS AND TOP EXECUTIVES	70	0.97	7.78
ALL OTHER MANAGERS AND ADMINISTRATORS	30	0.41	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	860	11.88	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	30	0.41	18.51
BUDGET ANALYSTS	20	0.28	4.54
ALL OTHER FINANCIAL SPECIALISTS	10	0.14	14.28
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	0.41	N/A
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.14	N/A
COST ESTIMATORS	10	0.14	39.99
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.14	N/A
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	40	0.55	8.29
CHEMICAL ENGINEERS	30	0.41	34.79
ELECTRICAL AND ELECTRONIC ENGINEERS	90	1.24	10.23
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.28	9.31
MECHANICAL ENGINEERS	120	1.66	7.41
ALL OTHER ENGINEERS	20	0.28	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	100	1.38	8.80
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	50	0.69	15.37
DRAFTERS	90	1.24	9.64
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	50	0.69	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	20	0.28	37.14
ALL OTHER PHYSICAL SCIENTISTS	10	0.14	31.94
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	20	0.28	28.32
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	50	0.69	6.14
COMPUTER PROGRAMMERS	20	0.28	16.13
COMPUTER PROGRAMMER AIDES	20	0.28	35.35
HEALTH PRACTITIONERS,TECHNOLOGISTS,TECHNICIANS	10	0.14	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.14	23.57
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.14	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRICAL INDUSTRIAL APPARATUS
SIC = 362
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES AND RELATED OCCUPATIONS	110	1.52	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.28	15.30
SALES ENGINEERS	80	1.10	3.14
SALES REPS,SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.14	30.61
ALL OTHER SALES AND RELATED WORKERS	10	0.14	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	580	8.01	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	20	0.28	18.02
ADJUSTMENT CLERKS	40	0.55	3.36
SECRETARIES	120	1.66	8.59
RECEPTIONISTS AND INFORMATION CLERKS	10	0.14	N/A
TYPISTS	10	0.14	7.69
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.14	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.14	39.99
PROCUREMENT CLERKS	10	0.14	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	0.55	11.80
PAYROLL AND TIMEKEEPING CLERKS	10	0.14	11.11
BILLING, COST AND RATE CLERKS	10	0.14	19.99
GENERAL OFFICE CLERKS	50	0.69	13.32
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.28	11.02
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.14	19.24
SWITCHBOARD OPERATORS	10	0.14	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	70	0.97	1.91
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.41	7.98
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	0.97	6.04
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.28	N/A
SERVICE OCCUPATIONS	130	1.80	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.14	N/A
GUARDS AND WATCH GUARDS	50	0.69	3.92
JANITORS & CLEANERS, EXC.MAIDS & HOUSE CLEANERS	60	0.83	8.49
ALL OTHER SERVICE WORKERS	*	N/A	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	*	N/A	N/A
A 0 AGRICULTURAL, FORESTRY, FISHING & RELATED	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRICAL INDUSTRIAL APPARATUS
SIC = 362
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	5250	72.51	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.14	7.14
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	220	3.04	3.81
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.14	N/A
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.14	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	170	2.35	3.34
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	50	0.69	14.13
MACHINERY MAINTENANCE MECHANICS	30	0.41	3.44
MILLWRIGHTS	30	0.41	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.14	41.45
ELECTRONICS REPAIRERS, COMMERCIAL, IND EQUIPMENT	10	0.14	N/A
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	10	0.14	N/A
PRECISION INSTRUMENT REPAIRERS	10	0.14	N/A
CARPENTERS	10	0.14	N/A
ELECTRICIANS	60	0.83	N/A
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	30	0.41	N/A
TOOL AND DIE MAKERS	230	3.18	1.58
MACHINISTS	80	1.10	20.43
SHEET METAL WORKERS	30	0.41	44.58
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	20	0.28	40.82
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	10	0.14	31.62
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	50	0.69	3.33
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	30	0.41	N/A
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	530	7.32	0.56
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	10	0.14	16.66
WELDING MACHINE OPERATORS AND TENDERS	10	0.14	26.72
SOLDERING & BRAZING MACHINE OPERATORS AND TENDER	10	0.14	39.52
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	20	0.28	N/A
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	60	0.83	N/A
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	70	0.97	N/A
HEAT TREATING, ANNEALING, TEMPERING MCH OPS, TND	40	0.55	4.99
FURNACE OPERATORS AND TENDERS	10	0.14	12.49
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	40	0.55	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.14	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	10	0.14	39.99
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	10	0.14	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.14	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	30	0.41	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	40	0.55	39.57
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	60	0.83	30.30

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRICAL INDUSTRIAL APPARATUS
SIC = 362
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	100	1.38	15.10
ELECTRICAL AND ELECTRONIC ASSEMBLERS	220	3.04	9.96
WELDERS AND CUTTERS	10	0.14	20.41
SOLDERERS AND BRAZERS	40	0.55	20.93
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	2650	36.60	0.66
ALL OTHER HAND WORKERS	60	0.83	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.14	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.14	14.28
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.14	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.41	N/A
MACHINE FEEDERS AND OFFBEARERS	20	0.28	43.87
HAND PACKERS AND PACKAGERS	30	0.41	9.58
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	20	0.28	20.00
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.14	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
RADIO AND TV RECEIVING EQUIPMENT
SIC = 365
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1870	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	180	9.63	N/A
FINANCIAL MANAGERS	30	1.60	3.33
PURCHASING MANAGERS	10	0.53	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	30	1.60	5.23
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	1.07	9.62
INDUSTRIAL PRODUCTION MANAGERS	30	1.60	8.81
GENERAL MANAGERS AND TOP EXECUTIVES	30	1.60	9.12
ALL OTHER MANAGERS AND ADMINISTRATORS	40	2.14	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	270	14.44	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	10	0.53	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.53	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	30	1.60	6.92
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.53	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	1.07	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	70	3.74	6.52
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	50	2.67	17.21
MECHANICAL ENGINEERS	10	0.53	N/A
ALL OTHER ENGINEERS	10	0.53	N/A
DRAFTERS	20	1.07	9.42
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.53	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.53	N/A
COMPUTER PROGRAMMERS	10	0.53	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	1.07	N/A
SALES AND RELATED OCCUPATIONS	40	2.14	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.53	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	1.07	20.78
ALL OTHER SALES AND RELATED WORKERS	10	0.53	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	320	17.11	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.53	N/A
ADJUSTMENT CLERKS	20	1.07	19.76
SECRETARIES	20	1.07	16.53
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.53	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
RADIO AND TV RECEIVING EQUIPMENT
SIC = 365
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.53	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	1.07	15.78
PROCUREMENT CLERKS	10	0.53	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	40	2.14	6.29
BILLING, COST AND RATE CLERKS	10	0.53	N/A
GENERAL OFFICE CLERKS	40	2.14	2.63
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	10	0.53	N/A
SWITCHBOARD OPERATORS	10	0.53	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	20	1.07	6.66
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	40	2.14	11.80
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	2.14	4.65
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	2.14	N/A
SERVICE OCCUPATIONS	50	2.67	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.53	N/A
GUARDS AND WATCH GUARDS	10	0.53	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	20	1.07	N/A
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.53	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1020	54.55	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	50	2.67	8.48
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.53	19.99
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.53	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	110	5.88	4.84
MACHINERY MAINTENANCE MECHANICS	40	2.14	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	10	0.53	N/A
ELECTRONIC HOME ENTERTAINMENT EQUIPMENT REPAIRER	10	0.53	15.97
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.53	N/A
ALL OTHER PRECISION METAL WORKERS	30	1.60	N/A
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	10	0.53	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	1.07	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	10	0.53	31.94
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.53	N/A
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	340	18.18	3.10
ALL OTHER PRECISION ASSEMBLERS	10	0.53	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	50	2.67	29.32
COIL WINDERS, TAPERS, AND FINISHERS	20	1.07	N/A
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	270	14.44	8.09
HAND PACKERS AND PACKAGERS	10	0.53	31.62
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.53	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMUNICATION EQUIPMENT
SIC = 366
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	36080	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	3030	8.40	N/A
FINANCIAL MANAGERS	190	0.53	14.27
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	110	0.30	10.71
PURCHASING MANAGERS	90	0.25	7.53
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	290	0.80	18.73
ADMINISTRATIVE SERVICES MANAGERS	110	0.30	23.54
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	1110	3.08	8.53
INDUSTRIAL PRODUCTION MANAGERS	440	1.22	9.19
GENERAL MANAGERS AND TOP EXECUTIVES	320	0.89	13.94
ALL OTHER MANAGERS AND ADMINISTRATORS	370	1.03	32.73
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	9700	26.88	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	250	0.69	12.75
BUDGET ANALYSTS	90	0.25	45.11
ALL OTHER FINANCIAL SPECIALISTS	20	0.06	35.85
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	150	0.42	22.98
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	160	0.44	6.87
COST ESTIMATORS	110	0.30	38.23
ALL OTHER MANAGEMENT SUPPORT WORKERS	850	2.36	23.69
ELECTRICAL AND ELECTRONIC ENGINEERS	3590	9.95	16.73
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	380	1.05	31.09
SAFETY ENGINEERS, EXCEPT MINING	10	0.03	28.74
MECHANICAL ENGINEERS	260	0.72	13.76
ALL OTHER ENGINEERS	90	0.25	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	1240	3.44	13.56
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	230	0.64	46.07
DRAFTERS	520	1.44	5.17
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	220	0.61	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	580	1.61	32.81
COMPUTER PROGRAMMERS	280	0.78	31.18
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.03	34.64
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	60	0.17	26.47
MATHEMATICAL SCIENTISTS	20	0.06	49.60
LAWYERS	10	0.03	41.23
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	30	0.08	8.60
WRITERS AND EDITORS	50	0.14	37.24
TECHNICAL WRITERS	130	0.36	25.91

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMUNICATION EQUIPMENT
SIC = 366
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
DESIGNERS, EXCEPT INTERIOR DESIGNERS	100	0.28	47.63
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	290	0.80	N/A
SALES AND RELATED OCCUPATIONS	1230	3.41	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	120	0.33	29.72
SALES ENGINEERS	630	1.75	48.85
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	310	0.86	34.55
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	60	0.17	20.61
ALL OTHER SALES AND RELATED WORKERS	110	0.30	24.59
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	4630	12.83	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	150	0.42	17.55
ADJUSTMENT CLERKS	80	0.22	15.54
SECRETARIES	950	2.63	12.85
STENOGRAPHERS	10	0.03	N/A
RECEPTIONISTS AND INFORMATION CLERKS	50	0.14	23.62
TYPISTS	140	0.39	16.87
TYPISTS, WORD PROCESSING EQUIPMENT	30	0.08	37.71
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	90	0.25	16.67
FILE CLERKS	30	0.08	31.97
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	80	0.22	16.83
PROCUREMENT CLERKS	80	0.22	22.75
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	390	1.08	8.34
PAYROLL AND TIMEKEEPING CLERKS	70	0.19	11.94
BILLING, COST AND RATE CLERKS	40	0.11	22.31
GENERAL OFFICE CLERKS	330	0.91	29.40
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	180	0.50	14.42
PERIPHERAL EDP EQUIPMENT OPERATORS	10	0.03	46.15
DATA ENTRY KEYERS, EXCEPT COMPOSING	120	0.33	7.43
ALL OTHER OFFICE MACHINE OPERATORS	40	0.11	22.77
SWITCHBOARD OPERATORS	70	0.19	18.72
PRODUCTION, PLANNING AND EXPEDITING CLERKS	610	1.69	7.25
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	390	1.08	10.33
TRAFFIC, SHIPPING AND RECEIVING CLERKS	210	0.58	14.82
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.06	17.45
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	480	1.33	N/A
SERVICE OCCUPATIONS	540	1.50	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMUNICATION EQUIPMENT
SIC = 366
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SERVICE SUPERVISORS	20	0.06	N/A
GUARDS AND WATCH GUARDS	230	0.64	23.52
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	270	0.75	27.80
A O CLEANING & BUILDING SERV WORKERS,X PRIV HSH	10	0.03	41.57
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD,CONSTR,OPERATING,MAINT & MATL HANDL OCCS	16960	47.01	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	70	0.19	21.23
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	760	2.11	10.08
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.03	41.57
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	80	0.22	18.08
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	60	0.17	42.32
PRECISION INSPECTORS, TESTERS AND GRADERS	420	1.16	16.84
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	1810	5.02	19.02
MACHINERY MAINTENANCE MECHANICS	80	0.22	25.75
MILLWRIGHTS	50	0.14	23.06
MAINTENANCE REPAIRERS, GENERAL UTILITY	100	0.28	31.37
ELECTRONICS REPAIRERS, COMMERCIAL, IND EQUIPMENT	40	0.11	N/A
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	20	0.06	26.50
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	750	2.08	N/A
CARPENTERS	20	0.06	12.59
ELECTRICIANS	90	0.25	17.37
PAINTERS,PAPERHANGERS,CONSTRUCTION,MAINTENANCE	30	0.08	17.12
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	40	0.11	27.25
TOOL AND DIE MAKERS	150	0.42	16.16
MACHINISTS	300	0.83	22.79
SHEET METAL WORKERS	140	0.39	30.48
ALL OTHER PRECISION METAL WORKERS	40	0.11	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	20	0.06	47.78
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	130	0.36	35.47
WELDING MACHINE SETTERS AND SET-UP OPERATORS	30	0.08	47.78
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	190	0.53	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	170	0.47	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	10	0.03	48.43
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	20	0.06	N/A
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDER	30	0.08	32.31
CLEANING,WASHING,PICKLING EQUIPMENT OPS,TENDER	10	0.03	39.96
CRUSHNG,GRINDNG,MIXNG & BLENDING MCH OPS,TNDR	20	0.06	47.05
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	0.08	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	170	0.47	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COMMUNICATION EQUIPMENT
SIC = 366
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	30	0.08	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	380	1.05	17.03
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	1310	3.63	25.97
ELECTRICAL AND ELECTRONIC ASSEMBLERS	1450	4.02	22.55
WELDERS AND CUTTERS	80	0.22	35.37
SOLDERERS AND BRAZERS	80	0.22	29.89
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	180	0.50	27.86
ALL OTHER HAND WORKERS	90	0.25	N/A
PLANT AND SYSTEMS OCCUPATIONS	40	0.11	32.23
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	50	0.14	17.99
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.06	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	100	0.28	44.31
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	7310	20.26	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRONIC COMPONENTS AND ACCESSORIES
SIC = 367
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	56810	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	6570	11.56	N/A
FINANCIAL MANAGERS	740	1.30	5.27
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	440	0.77	13.14
PURCHASING MANAGERS	230	0.40	19.22
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	530	0.93	8.91
ADMINISTRATIVE SERVICES MANAGERS	160	0.28	11.07
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	1750	3.08	6.16
INDUSTRIAL PRODUCTION MANAGERS	1670	2.94	8.33
GENERAL MANAGERS AND TOP EXECUTIVES	670	1.18	12.20
ALL OTHER MANAGERS AND ADMINISTRATORS	380	0.67	8.14
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	18180	32.00	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	640	1.13	5.10
BUDGET ANALYSTS	400	0.70	4.71
ALL OTHER FINANCIAL SPECIALISTS	50	0.09	41.37
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	520	0.92	12.41
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	720	1.27	19.97
COST ESTIMATORS	60	0.11	20.38
ALL OTHER MANAGEMENT SUPPORT WORKERS	2010	3.54	16.27
METALLURGISTS & METAL. CERAMIC, MATERIALS ENG	10	0.02	34.99
CHEMICAL ENGINEERS	110	0.19	40.99
ELECTRICAL AND ELECTRONIC ENGINEERS	4520	7.96	5.12
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	960	1.69	10.07
MECHANICAL ENGINEERS	760	1.34	14.94
ALL OTHER ENGINEERS	880	1.55	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	2250	3.96	7.42
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	350	0.62	11.42
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	320	0.56	13.18
DRAFTERS	430	0.76	20.84
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	480	0.84	6.39
ALL OTHER PHYSICAL SCIENTISTS	10	0.02	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	150	0.26	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	1690	2.97	6.04
COMPUTER PROGRAMMERS	240	0.42	9.37
COMPUTER PROGRAMMER AIDES	20	0.04	11.66
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	50	0.09	35.32
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	10	0.02	33.07

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRONIC COMPONENTS AND ACCESSORIES
SIC = 367
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
LAWYERS	40	0.07	N/A
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	50	0.09	2.77
WRITERS AND EDITORS	70	0.12	12.85
TECHNICAL WRITERS	100	0.18	18.78
DESIGNERS, EXCEPT INTERIOR DESIGNERS	50	0.09	8.41
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	260	0.46	N/A
SALES AND RELATED OCCUPATIONS	2240	3.94	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	420	0.74	7.94
SALES ENGINEERS	260	0.46	33.74
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	970	1.71	9.41
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	120	0.21	46.43
ALL OTHER SALES AND RELATED WORKERS	480	0.84	11.84
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	6570	11.56	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	340	0.60	11.96
ADJUSTMENT CLERKS	160	0.28	11.39
SECRETARIES	2150	3.78	5.68
RECEPTIONISTS AND INFORMATION CLERKS	90	0.16	24.01
TYPISTS	120	0.21	28.56
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	70	0.12	39.16
FILE CLERKS	20	0.04	22.16
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	80	0.14	27.96
PROCUREMENT CLERKS	80	0.14	12.31
STATISTICAL CLERKS	20	0.04	8.66
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	700	1.23	9.61
PAYROLL AND TIMEKEEPING CLERKS	80	0.14	23.17
BILLING, COST AND RATE CLERKS	60	0.11	29.14
GENERAL OFFICE CLERKS	170	0.30	19.80
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	310	0.55	5.24
PERIPHERAL EDP EQUIPMENT OPERATORS	20	0.04	7.21
DATA ENTRY KEYERS, EXCEPT COMPOSING	130	0.23	11.24
ALL OTHER OFFICE MACHINE OPERATORS	10	0.02	N/A
SWITCHBOARD OPERATORS	70	0.12	19.96
PRODUCTION, PLANNING AND EXPEDITING CLERKS	890	1.57	11.85
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.02	33.07
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	420	0.74	10.61
TRAFFIC, SHIPPING AND RECEIVING CLERKS	440	0.77	12.40
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	50	0.09	7.85

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRONIC COMPONENTS AND ACCESSORIES
SIC = 367
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	90	0.16	N/A
SERVICE OCCUPATIONS	700	1.23	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	110	0.19	29.86
GUARDS AND WATCH GUARDS	260	0.46	10.17
ALL OTHER FOOD SERVICE WORKERS	20	0.04	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	310	0.55	12.61
ALL OTHER SERVICE WORKERS	10	0.02	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	22550	39.69	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	100	0.18	30.68
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	1520	2.68	6.74
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	30	0.05	15.56
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	60	0.11	32.99
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	60	0.11	43.52
PRECISION INSPECTORS, TESTERS AND GRADERS	1330	2.34	14.49
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	1610	2.83	16.10
MACHINERY MAINTENANCE MECHANICS	190	0.33	19.22
MACHINERY MAINTENANCE WORKERS	20	0.04	28.32
MAINTENANCE REPAIRERS, GENERAL UTILITY	370	0.65	21.60
ELECTRONIC HOME ENTERTAINMENT EQUIPMENT REPAIRER	60	0.11	N/A
ELECTRONICS REPAIRERS, COMMERCIAL, IND EQUIPMENT	20	0.04	32.65
HEATING, AIR CONDTNNG, REFRIG MECHANICS & INSTLL	30	0.05	6.41
PRECISION INSTRUMENT REPAIRERS	50	0.09	37.84
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	30	0.05	N/A
CARPENTERS	20	0.04	6.14
ELECTRICIANS	80	0.14	12.22
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.02	28.57
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.02	33.07
A O CONSTRUCTION,EXTRACTIVE WORKERS,EXC HELPER	40	0.07	28.13
TOOL AND DIE MAKERS	130	0.23	24.44
MACHINISTS	660	1.16	34.20
TOOL GRNDRS,FLRS,SHRPNRS,OTHR PRECISION WORKR	10	0.02	28.28
SHEET METAL WORKERS	30	0.05	19.40
ALL OTHER PRECISION METAL WORKERS	20	0.04	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.02	38.56
SAWING MACHINE TOOL SETTRS, SET-UP OPS, METAL PL	10	0.02	42.49
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	40	0.07	47.35
GRINDNG, LAPPNG,BUFFNG MCH TOOL STTRS,SET-UP	20	0.04	42.39

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ELECTRONIC COMPONENTS AND ACCESSORIES
SIC = 367
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	80	0.14	12.62
SHEAR, SLITTER MCH SETTERS, SET-UP OPS, MET & PL	80	0.14	26.73
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	350	0.62	42.65
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	310	0.55	43.23
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	60	0.11	21.04
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	20	0.04	43.36
WELDING MACHINE SETTERS AND SET-UP OPERATORS	10	0.02	40.40
WELDING MACHINE OPERATORS AND TENDERS	90	0.16	19.81
SOLDERING & BRAZING MACHINE OPERATORS AND TENDER	140	0.25	48.84
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	160	0.28	33.58
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	40	0.07	34.40
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET.	530	0.93	32.61
FURNACE OPERATORS AND TENDERS	80	0.14	39.44
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	630	1.11	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	980	1.73	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	10	0.02	41.65
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	310	0.55	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	20	0.04	11.02
ELECTRONIC SEMICONDUCTOR PROCESSORS	1290	2.27	30.79
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	80	0.14	31.13
COATING, PAINTING, SPRAYING MCH OPERATORS,TENDER	10	0.02	26.45
CLEANING, WASHING, PICKLING EQUIPMENT OPS,TENDER	70	0.12	48.38
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	20	0.04	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	40	0.07	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	300	0.53	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	1350	2.38	35.58
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	3210	5.65	22.72
ALL OTHER PRECISION ASSEMBLERS	80	0.14	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	2700	4.75	21.53
COIL WINDERS, TAPERS, AND FINISHERS	230	0.40	49.72
WELDERS AND CUTTERS	120	0.21	41.35
SOLDERERS AND BRAZERS	320	0.56	43.05
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	840	1.48	25.96
ALL OTHER HAND WORKERS	700	1.23	N/A
ALL OTHER PLANT AND SYSTEMS OPERATORS	30	0.05	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	40	0.07	4.68
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	50	0.09	23.94
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.02	N/A
MECHANIC AND REPAIRER HELPERS	10	0.02	17.32
MACHINE FEEDERS AND OFFBEARERS	140	0.25	45.21
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	270	0.48	21.63
HAND PACKERS AND PACKAGERS	160	0.28	35.43
ALL OTHER HELPERS,LABORERS MATERIAL MOVERS	50	0.09	11.48

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS ELECTRICAL EQUIPMENT AND SUPPLIES
SIC = 369
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5190	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	470	9.06	N/A
FINANCIAL MANAGERS	40	0.77	11.45
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.19	10.87
PURCHASING MANAGERS	10	0.19	14.14
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	40	0.77	6.97
ADMINISTRATIVE SERVICES MANAGERS	30	0.58	14.32
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	80	1.54	12.84
INDUSTRIAL PRODUCTION MANAGERS	120	2.31	13.16
GENERAL MANAGERS AND TOP EXECUTIVES	110	2.12	8.59
ALL OTHER MANAGERS AND ADMINISTRATORS	20	0.39	15.05
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1150	22.16	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	50	0.96	18.98
ALL OTHER FINANCIAL SPECIALISTS	40	0.77	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	50	0.96	13.40
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	30	0.58	3.70
COST ESTIMATORS	50	0.96	23.78
ALL OTHER MANAGEMENT SUPPORT WORKERS	60	1.16	24.62
ELECTRICAL AND ELECTRONIC ENGINEERS	220	4.24	16.94
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	40	0.77	22.31
MECHANICAL ENGINEERS	30	0.58	14.65
ALL OTHER ENGINEERS	40	0.77	N/A
CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS	20	0.39	22.90
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	220	4.24	5.34
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.19	36.05
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	30	0.58	21.90
DRAFTERS	40	0.77	19.99
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.19	44.72
PHYSICISTS AND ASTRONOMERS	20	0.39	20.00
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	50	0.96	24.28
COMPUTER PROGRAMMERS	10	0.19	49.99
COMPUTER PROGRAMMER AIDES	10	0.19	44.44
MATHEMATICAL SCIENTISTS	10	0.19	19.99
LAWYERS	10	0.19	31.94
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.19	N/A
TECHNICAL WRITERS	20	0.39	24.49
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.19	22.26

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS ELECTRICAL EQUIPMENT AND SUPPLIES
SIC = 369
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	110	2.12	N/A
SALES AND RELATED OCCUPATIONS	210	4.05	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.58	17.12
SALES ENGINEERS	20	0.39	24.25
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	70	1.35	15.96
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	0.39	34.10
ALL OTHER SALES AND RELATED WORKERS	80	1.54	26.10
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	680	13.10	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.96	6.90
ADJUSTMENT CLERKS	30	0.58	36.97
SECRETARIES	100	1.93	17.45
RECEPTIONISTS AND INFORMATION CLERKS	10	0.19	18.18
TYPISTS	10	0.19	23.57
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.19	34.01
FILE CLERKS	10	0.19	16.66
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	20	0.39	25.45
PROCUREMENT CLERKS	10	0.19	15.71
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	50	0.96	13.84
PAYROLL AND TIMEKEEPING CLERKS	20	0.39	13.97
BILLING, COST AND RATE CLERKS	10	0.19	38.72
GENERAL OFFICE CLERKS	30	0.58	14.42
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.77	6.44
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.19	17.67
SWITCHBOARD OPERATORS	10	0.19	11.78
PRODUCTION, PLANNING AND EXPEDITING CLERKS	30	0.58	27.77
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.58	19.94
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	0.77	26.40
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.19	19.99
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	160	3.08	N/A
SERVICE OCCUPATIONS	80	1.54	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.19	31.42
ALL OTHER PROTECTIVE SERVICE WORKERS	20	0.39	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	30	0.58	10.49
ALL OTHER SERVICE WORKERS	10	0.19	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS ELECTRICAL EQUIPMENT AND SUPPLIES
SIC = 369
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	10	0.19	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2600	50.10	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	50	0.96	22.16
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	100	1.93	7.58
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.19	16.66
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.19	18.63
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.19	25.71
PRECISION INSPECTORS, TESTERS AND GRADERS	100	1.93	14.03
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	60	1.16	21.10
MACHINERY MAINTENANCE MECHANICS	110	2.12	2.90
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.39	24.05
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	50	0.96	N/A
ELECTRICIANS	10	0.19	23.57
TOOL AND DIE MAKERS	30	0.58	8.94
MACHINISTS	80	1.54	17.93
ALL OTHER PRECISION METAL WORKERS	20	0.39	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.19	19.99
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	10	0.19	N/A
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	10	0.19	N/A
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	20	0.39	21.05
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	20	0.39	48.53
WELDING MACHINE SETTERS AND SET-UP OPERATORS	10	0.19	49.30
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	10	0.19	16.66
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	10	0.19	20.20
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	50	0.96	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.19	N/A
COATING,PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.19	44.60
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDER	10	0.19	20.20
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.19	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	40	0.77	23.92
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	380	7.32	10.21
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	310	5.97	20.78
ELECTRICAL AND ELECTRONIC ASSEMBLERS	230	4.43	6.24
COIL WINDERS, TAPERS, AND FINISHERS	10	0.19	28.57
WELDERS AND CUTTERS	20	0.39	26.51
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	410	7.90	38.25
ALL OTHER HAND WORKERS	230	4.43	N/A
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKERS	10	0.19	48.98

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS ELECTRICAL EQUIPMENT AND SUPPLIES
SIC = 369
REFERENCE DATE JUNE, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.19	48.98
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.19	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	100	1.93	3.03
HAND PACKERS AND PACKAGERS	30	0.58	17.12
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	10	0.19	7.14
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.19	N/A

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N/A - NOT AVAILABLE

Instruments and Related Products

SIC 38

This major group includes establishments engaged in manufacturing instruments (including professional and scientific) for measuring, testing, analyzing and controlling, and their associate sensors and accessories; optical instruments and lenses; surveying and drafting instruments and supplies; photographic equipment and supplies; and watches and clocks.

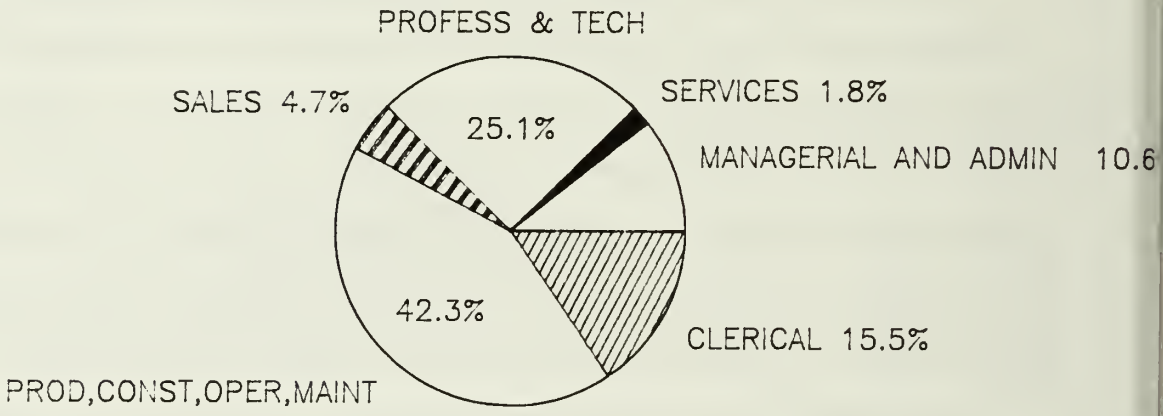
Employment in the instruments and related products industry has fallen by 2,600 jobs or 4.5 percent over the survey's 1983-1986 time frame.

The largest major occupational category in instruments was production and maintenance with 23,700 jobs representing 42.3 percent of industry employment.

Employment is highest in the assemblers and fabricators (except electronic and electrical machinery) occupation, with 5,100 jobs or approximately 9.2 percent. Top executives, by contrast, constitute a little over 1,200 jobs or approximately 2.2 percent of the industry's employment.

INSTRUMENTS AND RELATED PRODUCTS (SIC-38)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Assemblers, Fabricators, Except Machine Electrical, Electronic	5080
2.	Electrical and Electronic Engineers	2160
3.	Secretaries	2120
4.	Electromechanical Equipment Assemblers	1810
5.	Electrical, Electronic Engineering Technicians & Technologists	1630
6.	Electrical and Electronic Assemblers	1560
7.	Electrical, Electronic Equipment Assemblers	1250
8.	All Other Engineers	1240
9.	General Managers and Top Executives	1230
10.	First Line Supervisors - Production, Operating Workers	1230

OCCUPATIONS OF EMPLOYEES
INSTRUMENTS AND RELATED PRODUCTS
SIC = 38
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	55990	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	5950	10.63	N/A
FINANCIAL MANAGERS	540	0.96	14.36
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	220	0.39	11.93
PURCHASING MANAGERS	170	0.30	11.83
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	810	1.45	14.37
ADMINISTRATIVE SERVICES MANAGERS	170	0.30	10.84
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	790	1.41	9.08
INDUSTRIAL PRODUCTION MANAGERS	820	1.46	11.41
GENERAL MANAGERS AND TOP EXECUTIVES	1230	2.20	13.94
ALL OTHER MANAGERS AND ADMINISTRATORS	1190	2.13	17.76
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	14060	25.11	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	450	0.80	17.96
BUDGET ANALYSTS	160	0.29	21.60
ALL OTHER FINANCIAL SPECIALISTS	150	0.27	18.67
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	410	0.73	10.27
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	380	0.68	13.95
COST ESTIMATORS	70	0.13	27.54
ALL OTHER MANAGEMENT SUPPORT WORKERS	510	0.91	16.54
CHEMICAL ENGINEERS	140	0.25	32.64
ELECTRICAL AND ELECTRONIC ENGINEERS	2160	3.86	12.47
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	540	0.96	14.02
MECHANICAL ENGINEERS	1090	1.95	14.68
ALL OTHER ENGINEERS	1240	2.21	16.04
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	1630	2.91	14.79
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	100	0.18	11.22
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	760	1.36	23.00
DRAFTERS	750	1.34	13.35
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	590	1.05	12.79
PHYSICISTS AND ASTRONOMERS	70	0.13	25.76
CHEMISTS, EXCEEPT BIOCHEMISTS	250	0.45	23.27
ALL OTHER PHYSICAL SCIENTISTS	10	0.02	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	150	0.27	30.72
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.02	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	380	0.68	11.75
COMPUTER PROGRAMMERS	360	0.64	15.49
COMPUTER PROGRAMMER AIDES	120	0.21	21.49

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
INSTRUMENTS AND RELATED PRODUCTS
SIC = 38
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	70	0.13	21.43
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	60	0.11	29.69
OPTICIANS, DISPENSING AND MEASURING	60	0.11	21.67
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	60	0.11	8.93
WRITERS AND EDITORS	70	0.13	17.14
TECHNICAL WRITERS	170	0.30	15.06
DESIGNERS, EXCEPT INTERIOR DESIGNERS	230	0.41	17.39
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	880	1.57	N/A
SALES AND RELATED OCCUPATIONS	2620	4.68	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	320	0.57	14.60
SALES ENGINEERS	560	1.00	13.13
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	920	1.64	16.29
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	370	0.66	40.60
ALL OTHER SALES AND RELATED WORKERS	460	0.82	10.65
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	8690	15.52	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	420	0.75	14.18
ADJUSTMENT CLERKS	300	0.54	13.53
SECRETARIES	2120	3.79	10.12
RECEPTIONISTS AND INFORMATION CLERKS	110	0.20	18.75
TYPISTS	210	0.38	18.31
TYPISTS, WORD PROCESSING EQUIPMENT	130	0.23	23.85
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	110	0.20	7.21
FILE CLERKS	270	0.48	11.94
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	360	0.64	13.61
PROCUREMENT CLERKS	160	0.29	15.24
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	750	1.34	9.64
PAYROLL AND TIMEKEEPING CLERKS	140	0.25	7.86
BILLING, COST AND RATE CLERKS	160	0.29	10.19
GENERAL OFFICE CLERKS	380	0.68	26.98
BILLING, POSTING, CALCULATING MACH. OPERATORS	60	0.11	27.12
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	250	0.45	13.04
DATA ENTRY KEYERS, EXCEPT COMPOSING	190	0.34	8.90
ALL OTHER OFFICE MACHINE OPERATORS	30	0.05	40.74
SWITCHBOARD OPERATORS	200	0.36	14.93
PRODUCTION, PLANNING AND EXPEDITING CLERKS	640	1.14	9.70
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	20	0.04	40.00
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	650	1.16	11.93

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
INSTRUMENTS AND RELATED PRODUCTS
SIC = 38
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TRAFFIC, SHIPPING AND RECEIVING CLERKS	630	1.13	13.00
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	100	0.18	24.49
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	310	0.55	27.83
SERVICE OCCUPATIONS	990	1.77	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	160	0.29	29.68
GUARDS AND WATCH GUARDS	260	0.46	6.15
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	540	0.96	11.11
ALL OTHER SERVICE WORKERS	30	0.05	N/A
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	10	0.02	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	23670	42.28	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	70	0.13	20.83
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	1230	2.20	11.20
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	50	0.09	15.69
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	170	0.30	17.26
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	120	0.21	40.17
PRECISION INSPECTORS, TESTERS AND GRADERS	1210	2.16	14.23
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	1000	1.79	15.15
MACHINERY MAINTENANCE MECHANICS	280	0.50	12.14
MACHINERY MAINTENANCE WORKERS	30	0.05	4.00
MAINTENANCE REPAIRERS, GENERAL UTILITY	320	0.57	19.44
PRECISION INSTRUMENT REPAIRERS	500	0.89	40.16
CAMERA AND PHOTOGRAPHIC EQUIPMENT REPAIRERS	10	0.02	40.00
CARPENTERS	60	0.11	10.53
ELECTRICIANS	170	0.30	4.12
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	40	0.07	20.00
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	70	0.13	11.43
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	30	0.05	14.29
TOOL AND DIE MAKERS	220	0.39	9.26
PRECISION INSTRUMENT MAKERS	240	0.43	40.50
MACHINISTS	850	1.52	20.05
TOOL GRNDRS,FLRS,SHRPNRS,OTHR PRECISION WORKERS	30	0.05	40.63
SHEET METAL WORKERS	60	0.11	23.64
ALL OTHER PRECISION METAL WORKERS	50	0.09	47.92
PRECISION WOODWORKERS	90	0.16	40.70
PRECISION OPTICAL GOODS WORKERS	710	1.27	12.15

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
INSTRUMENTS AND RELATED PRODUCTS
SIC = 38
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MEDICAL APPLIANCE MAKERS	370	0.66	49.46
ALL OTHER PRECISION METAL WORKERS	100	0.18	28.57
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	290	0.52	31.49
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	80	0.14	38.46
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	60	0.11	24.56
MACHINE TOOL CUTTING OPERATORS AND TENDERS	420	0.75	27.47
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	40	0.07	24.32
PRESS, PRESS BRAKE MACH SETTERS AND SET-UP OPS	10	0.02	36.36
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	110	0.20	22.86
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	190	0.34	13.68
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	70	0.13	49.25
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	20	0.04	16.67
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	90	0.16	4.44
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	370	0.66	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	350	0.63	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	110	0.20	8.41
CHEMICAL EQUIPMENT TENDERS	40	0.07	25.00
COATING,PAINTING,SPRAYING MCH SETTRS, SET-UP	60	0.11	23.81
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDER	40	0.07	15.91
CLEANING,WASHING,PICKLING EQUIPMENT OPS,TENDER	30	0.05	6.90
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	120	0.21	37.90
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	40	0.07	36.59
ALL OTHER MACHINE OPERATORS AND TENDERS	410	0.73	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	120	0.21	48.70
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	1810	3.23	23.71
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	1250	2.23	15.91
ALL OTHER PRECISION ASSEMBLERS	140	0.25	N/A
ALL OTHER PRECISION ASSEMBLERS, EXCEPT METAL	150	0.27	N/A
MACHINE ASSEMBLERS	500	0.89	45.47
ELECTRICAL AND ELECTRONIC ASSEMBLERS	1560	2.79	17.37
WELDERS AND CUTTERS	90	0.16	42.86
SOLDERERS AND BRAZERS	260	0.46	32.20
HAND PAINTING AND RELATED WORKERS	10	0.02	N/A
GRINDING AND POLISHING WORKERS, HAND	30	0.05	36.36
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	5080	9.07	22.00
ALL OTHER HAND WORKERS	100	0.18	N/A
PLANT AND SYSTEMS OCCUPATIONS	20	0.04	15.79
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.02	27.27
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKER	100	0.18	19.39
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	100	0.18	21.65
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	20	0.04	31.82

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OCCUPATIONS OF EMPLOYEES
INSTRUMENTS AND RELATED PRODUCTS
SIC = 38
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MECHANIC AND REPAIRER HELPERS	30	0.05	24.00
MACHINE FEEDERS AND OFFBEARERS	180	0.32	44.20
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	380	0.68	20.11
HAND PACKERS AND PACKAGERS	450	0.80	37.78
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	120	0.21	26.72
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	190	0.34	N/A

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OCCUPATIONS OF EMPLOYEES
ENGINEERING AND SCIENTIFIC INSTRUMENTS
SIC = 381
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5050	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	890	17.62	N/A
FINANCIAL MANAGERS	60	1.19	12.24
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.40	N/A
PURCHASING MANAGERS	20	0.40	6.24
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	60	1.19	28.64
ADMINISTRATIVE SERVICES MANAGERS	30	0.59	7.90
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	180	3.56	5.17
INDUSTRIAL PRODUCTION MANAGERS	90	1.78	11.97
GENERAL MANAGERS AND TOP EXECUTIVES	290	5.74	15.94
ALL OTHER MANAGERS AND ADMINISTRATORS	140	2.77	15.47
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1430	28.32	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	50	0.99	10.50
BUDGET ANALYSTS	30	0.59	N/A
ALL OTHER FINANCIAL SPECIALISTS	20	0.40	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	50	0.99	15.54
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.20	N/A
CHEMICAL ENGINEERS	10	0.20	40.06
ELECTRICAL AND ELECTRONIC ENGINEERS	300	5.94	13.43
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	100	1.98	3.06
MECHANICAL ENGINEERS	180	3.56	19.49
ALL OTHER ENGINEERS	130	2.57	11.48
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	160	3.17	24.72
DRAFTERS	100	1.98	19.82
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	120	2.38	N/A
PHYSICISTS AND ASTRONOMERS	10	0.20	31.94
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	10	0.20	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.20	N/A
COMPUTER PROGRAMMERS	30	0.59	37.68
TECHNICAL WRITERS	10	0.20	49.48
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	130	2.57	N/A
SALES AND RELATED OCCUPATIONS	140	2.77	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.40	21.20
SALES ENGINEERS	20	0.40	46.16
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	90	1.78	25.96

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OCCUPATIONS OF EMPLOYEES
ENGINEERING AND SCIENTIFIC INSTRUMENTS
SIC = 381
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER SALES AND RELATED WORKERS	20	0.40	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	710	14.06	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	40	0.79	19.58
SECRETARIES	160	3.17	9.34
RECEPTIONISTS AND INFORMATION CLERKS	20	0.40	26.30
TYPISTS	30	0.59	12.06
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.20	N/A
FILE CLERKS	10	0.20	24.99
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.20	15.38
PROCUREMENT CLERKS	10	0.20	15.97
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	120	2.38	15.92
GENERAL OFFICE CLERKS	20	0.40	29.77
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.40	28.34
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.40	N/A
ALL OTHER OFFICE MACHINE OPERATORS	10	0.20	N/A
SWITCHBOARD OPERATORS	10	0.20	7.69
PRODUCTION, PLANNING AND EXPEDITING CLERKS	60	1.19	8.54
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	30	0.59	31.71
TRAFFIC, SHIPPING AND RECEIVING CLERKS	40	0.79	16.36
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	100	1.98	N/A
SERVICE OCCUPATIONS	60	1.19	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	60	1.19	19.04
ALL OTHER SERVICE WORKERS	10	0.20	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	1810	35.84	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	110	2.18	13.51
PRECISION INSPECTORS, TESTERS AND GRADERS	80	1.58	13.30
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	50	0.99	11.89
MACHINERY MAINTENANCE MECHANICS	10	0.20	22.22
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.79	5.59
PRECISION INSTRUMENT REPAIRERS	40	0.79	28.07
ELECTRICIANS	10	0.20	N/A
TOOL AND DIE MAKERS	10	0.20	14.14
PRECISION INSTRUMENT MAKERS	10	0.20	28.28
MACHINISTS	160	3.17	24.93
SHEET METAL WORKERS	10	0.20	48.41

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
ENGINEERING AND SCIENTIFIC INSTRUMENTS
SIC = 381
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRECISION OPTICAL GOODS WORKERS	10	0.20	47.38
ALL OTHER PRECISION METAL WORKERS	10	0.20	N/A
LATHE TURNING MACHINE TOOL SETTERS,SET-UP OPS	20	0.40	41.01
GRINDNG,LAPPNG,BUFFNG MCH TOOL STTRS,SET-UP	20	0.40	33.33
MACHINE TOOL CUTTING OPERATORS AND TENDERS	20	0.40	47.85
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	10	0.20	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.20	N/A
CHEMICAL EQUIPMENT TENDERS	10	0.20	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	30	0.59	18.88
ALL OTHER MACHINE OPERATORS AND TENDERS	10	0.20	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	350	6.93	4.15
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	220	4.36	18.19
ALL OTHER PRECISION ASSEMBLERS	10	0.20	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	380	7.52	12.44
GRINDING AND POLISHING WORKERS, HAND	20	0.40	23.52
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	50	0.99	44.05
ALL OTHER HAND WORKERS	20	0.40	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKER	30	0.59	19.63
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	0.59	11.05
HAND PACKERS AND PACKAGERS	10	0.20	N/A
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	40	0.79	N/A
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	20	0.40	N/A

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OCCUPATIONS OF EMPLOYEES
MEASURING AND CONTROLLING DEVICES
SIC = 382
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	21060	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	2310	10.97	N/A
FINANCIAL MANAGERS	240	1.14	10.44
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	90	0.43	9.43
PURCHASING MANAGERS	70	0.33	14.77
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	400	1.90	10.22
ADMINISTRATIVE SERVICES MANAGERS	50	0.24	17.32
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	320	1.52	12.02
INDUSTRIAL PRODUCTION MANAGERS	400	1.90	11.22
GENERAL MANAGERS AND TOP EXECUTIVES	350	1.66	9.19
ALL OTHER MANAGERS AND ADMINISTRATORS	400	1.90	10.41
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	6130	29.11	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	170	0.81	8.40
BUDGET ANALYSTS	20	0.09	38.72
ALL OTHER FINANCIAL SPECIALISTS	50	0.24	37.40
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	190	0.90	9.87
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	130	0.62	11.63
COST ESTIMATORS	20	0.09	20.32
ALL OTHER MANAGEMENT SUPPORT WORKERS	260	1.23	15.63
ELECTRICAL AND ELECTRONIC ENGINEERS	1160	5.51	13.88
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	260	1.23	11.05
MECHANICAL ENGINEERS	470	2.23	14.85
ALL OTHER ENGINEERS	370	1.76	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	960	4.56	13.07
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	70	0.33	12.26
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	140	0.66	36.36
DRAFTERS	260	1.23	9.60
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	360	1.71	14.11
ALL OTHER PHYSICAL SCIENTISTS	50	0.24	N/A
ALL OTHER LIFE SCIENTISTS	40	0.19	N/A
ALL OTHER PHYSICAL AND LIFE SCIENCE TECHNICIANS	40	0.19	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	160	0.76	11.32
COMPUTER PROGRAMMERS	170	0.81	16.00
COMPUTER PROGRAMMER AIDES	30	0.14	17.58
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	20	0.09	24.20
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	30	0.14	38.63
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	10	0.05	19.24

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OCCUPATIONS OF EMPLOYEES
MEASURING AND CONTROLLING DEVICES
SIC = 382
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
WRITERS AND EDITORS	30	0.14	9.44
TECHNICAL WRITERS	80	0.38	12.14
DESIGNERS, EXCEPT INTERIOR DESIGNERS	90	0.43	17.69
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	480	2.28	18.77
SALES AND RELATED OCCUPATIONS	980	4.65	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	150	0.71	13.83
SALES ENGINEERS	470	2.23	10.08
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	200	0.95	31.13
ALL OTHER SALES AND RELATED WORKERS	160	0.76	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	3220	15.29	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	220	1.04	9.32
ADJUSTMENT CLERKS	80	0.38	24.36
SECRETARIES	760	3.61	6.97
RECEPTIONISTS AND INFORMATION CLERKS	40	0.19	24.23
TYPISTS	140	0.66	12.35
TYPISTS, WORD PROCESSING EQUIPMENT	60	0.28	23.48
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	30	0.14	16.82
FILE CLERKS	210	1.00	9.57
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	50	0.24	35.62
PROCUREMENT CLERKS	70	0.33	18.71
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	170	0.81	9.46
PAYROLL AND TIMEKEEPING CLERKS	50	0.24	14.40
BILLING, COST AND RATE CLERKS	50	0.24	14.28
GENERAL OFFICE CLERKS	90	0.43	24.06
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	110	0.52	10.99
DATA ENTRY KEYERS, EXCEPT COMPOSING	100	0.47	12.00
ALL OTHER OFFICE MACHINE OPERATORS	20	0.09	N/A
SWITCHBOARD OPERATORS	90	0.43	12.86
PRODUCTION, PLANNING AND EXPEDITING CLERKS	330	1.57	8.32
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	220	1.04	10.79
TRAFFIC, SHIPPING AND RECEIVING CLERKS	220	1.04	9.09
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	0.19	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	60	0.28	13.46
SERVICE OCCUPATIONS	330	1.57	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.09	30.15

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OCCUPATIONS OF EMPLOYEES
MEASURING AND CONTROLLING DEVICES
SIC = 382
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
GUARDS AND WATCH GUARDS	70	0.33	8.82
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANE	210	1.00	10.05
ALL OTHER SERVICE WORKERS	20	0.09	11.78
AGRICULTURAL, FORESTRY, FISHING, REL OCCUPATIONS	10	0.05	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	8090	38.41	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRER	30	0.14	22.87
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	550	2.61	7.90
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.09	25.30
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.14	23.47
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	60	0.28	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	580	2.75	9.46
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	330	1.57	17.49
MACHINERY MAINTENANCE MECHANICS	50	0.24	19.62
MACHINERY MAINTENANCE WORKERS	10	0.05	19.99
MAINTENANCE REPAIRERS, GENERAL UTILITY	100	0.47	19.00
PRECISION INSTRUMENT REPAIRERS	130	0.62	38.77
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	10	0.05	23.57
CARPENTERS	30	0.14	13.83
ELECTRICIANS	40	0.19	11.06
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	20	0.09	30.55
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.05	9.99
TOOL AND DIE MAKERS	40	0.19	21.05
PRECISION INSTRUMENT MAKERS	160	0.76	28.86
MACHINISTS	380	1.80	20.48
SHEET METAL WORKERS	20	0.09	28.56
ALL OTHER PRECISION METAL WORKERS	30	0.14	N/A
ALL OTHER PRECISION METAL WORKERS	70	0.33	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	40	0.19	43.15
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	40	0.19	47.23
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	20	0.09	23.41
MACHINE TOOL CUTTING OPERATORS AND TENDERS	310	1.47	15.13
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	80	0.38	22.05
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	80	0.38	20.34
COMB MACH TOOL SETTERS & SET-UP OPS, MET & PLAS	30	0.14	15.27
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	20	0.09	15.02
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	20	0.09	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.05	N/A

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OCCUPATIONS OF EMPLOYEES
MEASURING AND CONTROLLING DEVICES
SIC = 382
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDE	20	0.09	25.49
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.05	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	150	0.71	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	670	3.18	30.51
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	900	4.27	13.39
ALL OTHER PRECISION ASSEMBLERS	140	0.66	N/A
ALL OTHER PRECISION ASSEMBLERS, EXCEPT METAL	130	0.62	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	770	3.66	16.96
WELDERS AND CUTTERS	70	0.33	25.50
SOLDERERS AND BRAZERS	120	0.57	36.36
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	930	4.42	25.31
ALL OTHER HAND WORKERS	490	2.33	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.05	17.67
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	20	0.09	24.28
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	40	0.19	12.67
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.05	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	150	0.71	27.73
HAND PACKERS AND PACKAGERS	60	0.28	42.06
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	60	0.28	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
OPTICAL INSTRUMENTS AND LENSES
SIC = 383
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	6320	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	700	11.08	N/A
FINANCIAL MANAGERS	90	1.42	28.24
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.32	29.16
PURCHASING MANAGERS	10	0.16	18.63
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	50	0.79	9.24
ADMINISTRATIVE SERVICES MANAGERS	20	0.32	8.66
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	90	1.42	5.88
INDUSTRIAL PRODUCTION MANAGERS	100	1.58	9.57
GENERAL MANAGERS AND TOP EXECUTIVES	180	2.85	22.37
ALL OTHER MANAGERS AND ADMINISTRATORS	140	2.22	20.25
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1740	27.53	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	80	1.27	37.13
BUDGET ANALYSTS	20	0.32	N/A
ALL OTHER FINANCIAL SPECIALISTS	30	0.47	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	70	1.11	6.15
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	40	0.63	20.55
COST ESTIMATORS	10	0.16	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	140	2.22	16.71
CHEMICAL ENGINEERS	20	0.32	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	220	3.48	2.82
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	100	1.58	32.53
MECHANICAL ENGINEERS	140	2.22	7.94
ALL OTHER ENGINEERS	90	1.42	6.55
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	150	2.37	5.30
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.16	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	110	1.74	22.05
DRAFTERS	70	1.11	12.99
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	110	1.74	6.60
CHEMISTS, EXCEEPT BIOCHEMISTS	100	1.58	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	20	0.32	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	50	0.79	25.52
COMPUTER PROGRAMMERS	30	0.47	10.69
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.16	N/A
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	40	0.63	N/A
WRITERS AND EDITORS	20	0.32	9.42
TECHNICAL WRITERS	40	0.63	6.80

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
OPTICAL INSTRUMENTS AND LENSES
SIC = 383
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.16	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	40	0.63	N/A
SALES AND RELATED OCCUPATIONS	540	8.54	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	60	0.95	6.03
SALES ENGINEERS	20	0.32	N/A
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	200	3.16	5.88
ALL OTHER SALES AND RELATED WORKERS	260	4.11	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	980	15.51	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	40	0.63	22.42
ADJUSTMENT CLERKS	10	0.16	N/A
SECRETARIES	270	4.27	15.16
RECEPTIONISTS AND INFORMATION CLERKS	20	0.32	12.42
TYPISTS	10	0.16	36.85
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.32	8.66
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.32	N/A
FILE CLERKS	10	0.16	N/A
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	130	2.06	N/A
PROCUREMENT CLERKS	20	0.32	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	100	1.58	8.00
PAYROLL AND TIMEKEEPING CLERKS	10	0.16	N/A
BILLING, COST AND RATE CLERKS	10	0.16	N/A
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	30	0.47	13.26
DATA ENTRY KEYERS, EXCEPT COMPOSING	10	0.16	15.71
ALL OTHER OFFICE MACHINE OPERATORS	10	0.16	43.30
SWITCHBOARD OPERATORS	20	0.32	6.73
PRODUCTION, PLANNING AND EXPEDITING CLERKS	50	0.79	8.24
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	80	1.27	4.78
TRAFFIC, SHIPPING AND RECEIVING CLERKS	60	0.95	2.79
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.32	9.99
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	40	0.63	N/A
SERVICE OCCUPATIONS	80	1.27	N/A
ALL OTHER SERVICE SUPERVISORS	20	0.32	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	60	0.95	3.92
ALL OTHER SERVICE WORKERS	*	N/A	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
OPTICAL INSTRUMENTS AND LENSES
SIC = 383
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2290	36.23	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.16	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	190	3.01	11.53
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.16	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	180	2.85	13.04
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS WEIGH	50	0.79	18.95
MACHINERY MAINTENANCE MECHANICS	30	0.47	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.47	14.72
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	120	1.90	N/A
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.16	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.32	N/A
TOOL AND DIE MAKERS	20	0.32	N/A
MACHINISTS	140	2.22	17.70
SHEET METAL WORKERS	10	0.16	N/A
ALL OTHER PRECISION METAL WORKERS	40	0.63	N/A
PRECISION OPTICAL GOODS WORKERS	130	2.06	27.54
ALL OTHER PRECISION METAL WORKERS	40	0.63	N/A
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	80	1.27	18.31
MILLNG,PLANNG MACH SETTRS & SET-UP OPS,MET, PL	10	0.16	25.51
NUMERICAL CONTROL MACH TOOL OPS,TNDRS,MET & PL	80	1.27	3.10
ELECTROLYTIC PLTNG,CTNG MCH OPS,TNDRS,MET,PL	80	1.27	N/A
A O METAL,PLASTIC MACH SETTERS,SET-UP OPERATOR	20	0.32	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	0.32	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	10	0.16	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	30	0.47	41.87
ALL OTHER MACHINE OPERATORS AND TENDERS	30	0.47	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	320	5.06	5.66
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	80	1.27	12.09
ALL OTHER PRECISION ASSEMBLERS	60	0.95	34.91
MACHINE ASSEMBLERS	30	0.47	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	120	1.90	2.74
ASSMBLRS,FABRICTRS,EXC MCH ELCTRC,ELCTRNC	240	3.80	16.49
ALL OTHER HAND WORKERS	30	0.47	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.16	20.20
MECHANIC AND REPAIRER HELPERS	20	0.32	N/A
FREIGHT,STOCK AND MATERIAL MOVERS,HAND	10	0.16	N/A
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	10	0.16	N/A
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	10	0.16	N/A

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OCCUPATIONS OF EMPLOYEES
MEDICAL INSTRUMENTS AND SUPPLIES
SIC = 384
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	8650	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	750	8.67	N/A
FINANCIAL MANAGERS	40	0.46	8.08
PERSONNEL,TRAINING AND LABOR RELATION MANAGERS	30	0.35	20.14
PURCHASING MANAGERS	30	0.35	9.42
MARKETING,ADVERTISING,PUBLIC RELATIONS MGRS.	170	1.97	12.28
ADMINISTRATIVE SERVICES MANAGERS	20	0.23	11.13
ENGINEERING,MATH,MATERIALS SCIENCE MGRS.	130	1.50	4.55
INDUSTRIAL PRODUCTION MANAGERS	100	1.16	15.16
GENERAL MANAGERS AND TOP EXECUTIVES	170	1.97	16.55
ALL OTHER MANAGERS AND ADMINISTRATORS	70	0.81	24.07
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1210	13.99	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	70	0.81	20.50
BUDGET ANALYSTS	10	0.12	14.28
ALL OTHER FINANCIAL SPECIALISTS	20	0.23	12.42
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	40	0.46	10.25
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	30	0.35	9.42
ALL OTHER MANAGEMENT SUPPORT WORKERS	50	0.58	N/A
ELECTRICAL AND ELECTRONIC ENGINEERS	110	1.27	22.16
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	40	0.46	19.04
MECHANICAL ENGINEERS	160	1.85	19.06
ALL OTHER ENGINEERS	90	1.04	N/A
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	140	1.62	23.19
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.12	17.20
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	100	1.16	10.39
DRAFTERS	60	0.69	7.33
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	30	0.35	8.44
ALL OTHER PHYSICAL SCIENTISTS	40	0.46	N/A
LIFE SCIENTISTS	20	0.23	45.83
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	20	0.23	37.67
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	30	0.35	33.49
COMPUTER PROGRAMMERS	30	0.35	24.92
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	10	0.12	19.99
ALL OTHER MATHEMATICAL SCIENTISTS	10	0.12	N/A
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	10	0.12	N/A
TECHNICAL WRITERS	20	0.23	34.99
DESIGNERS, EXCEPT INTERIOR DESIGNERS	10	0.12	36.89

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MEDICAL INSTRUMENTS AND SUPPLIES
SIC = 384
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	80	0.92	N/A
SALES AND RELATED OCCUPATIONS	550	6.36	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	50	0.58	12.64
SALES REPS,SCIENTIFIC PROD & SVCS EXC RETAIL	420	4.86	11.63
ALL OTHER SALES AND RELATED WORKERS	90	1.04	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1370	15.84	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	60	0.69	23.79
ADJUSTMENT CLERKS	100	1.16	15.13
SECRETARIES	280	3.24	16.26
RECEPTIONISTS AND INFORMATION CLERKS	20	0.23	30.56
TYPISTS	20	0.23	45.68
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.23	21.20
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.12	10.10
FILE CLERKS	30	0.35	24.25
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	50	0.58	23.97
PROCUREMENT CLERKS	20	0.23	17.32
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	110	1.27	11.02
PAYROLL AND TIMEKEEPING CLERKS	10	0.12	14.28
BILLING, COST AND RATE CLERKS	20	0.23	23.61
GENERAL OFFICE CLERKS	110	1.27	34.65
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	30	0.35	17.43
DATA ENTRY KEYERS, EXCEPT COMPOSING	20	0.23	17.00
SWITCHBOARD OPERATORS	30	0.35	35.17
PRODUCTION, PLANNING AND EXPEDITING CLERKS	50	0.58	23.79
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.12	41.45
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	80	0.92	20.34
TRAFFIC, SHIPPING AND RECEIVING CLERKS	160	1.85	25.76
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	20	0.23	36.26
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	120	1.39	N/A
SERVICE OCCUPATIONS	90	1.04	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.23	41.87
ALL OTHER PROTECTIVE SERVICE WORKERS	10	0.12	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	50	0.58	30.76
ALL OTHER SERVICE WORKERS	*	N/A	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MEDICAL INSTRUMENTS AND SUPPLIES
SIC = 384
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	4680	54.10	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	30	0.35	24.28
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	200	2.31	17.01
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.12	22.22
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	10	0.12	38.46
PRECISION INSPECTORS, TESTERS AND GRADERS	120	1.39	18.50
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	230	2.66	18.69
MACHINERY MAINTENANCE MECHANICS	30	0.35	20.16
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.46	48.50
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	190	2.20	N/A
ELECTRICIANS	10	0.12	22.26
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.12	N/A
TOOL AND DIE MAKERS	10	0.12	26.35
MACHINISTS	60	0.69	17.46
ALL OTHER PRECISION METAL WORKERS	40	0.46	N/A
MEDICAL APPLIANCE MAKERS	360	4.16	48.44
ALL OTHER PRECISION METAL WORKERS	10	0.12	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	30	0.35	23.70
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	10	0.12	27.66
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	250	2.89	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	80	0.92	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.12	27.66
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	30	0.35	35.66
ALL OTHER MACHINE OPERATORS AND TENDERS	110	1.27	N/A
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	420	4.86	44.10
ALL OTHER PRECISION ASSEMBLERS	70	0.81	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	190	2.20	41.16
SOLDERERS AND BRAZERS	100	1.16	28.51
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	1600	18.50	15.20
ALL OTHER HAND WORKERS	10	0.12	N/A
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	10	0.12	20.41
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	20	0.23	4.99
MACHINE FEEDERS AND OFFBEARERS	120	1.39	31.54
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	70	0.81	27.73
HAND PACKERS AND PACKAGERS	150	1.73	37.48
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	40	0.46	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
OPHTHALMIC GOODS
SIC = 385
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3370	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	230	6.82	N/A
FINANCIAL MANAGERS	30	0.89	13.26
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.59	6.66
PURCHASING MANAGERS	10	0.30	N/A
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	40	1.19	6.96
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	20	0.59	N/A
INDUSTRIAL PRODUCTION MANAGERS	30	0.89	8.57
GENERAL MANAGERS AND TOP EXECUTIVES	50	1.48	8.71
ALL OTHER MANAGERS AND ADMINISTRATORS	40	1.19	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	260	7.72	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	20	0.59	8.83
BUDGET ANALYSTS	10	0.30	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.30	9.09
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	10	0.30	N/A
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.59	N/A
CHEMICAL ENGINEERS	10	0.30	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	10	0.30	N/A
MECHANICAL ENGINEERS	20	0.59	N/A
ALL OTHER ENGINEERS .	30	0.89	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.30	27.95
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	20	0.59	N/A
PHYSICISTS AND ASTRONOMERS	10	0.30	N/A
CHEMISTS, EXCEEPT BIOCHEMISTS	10	0.30	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	10	0.30	N/A
OPTICIANS, DISPENSING AND MEASURING	50	1.48	21.75
DESIGNERS, EXCEPT INTERIOR DESIGNERS	20	0.59	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	10	0.30	N/A
SALES AND RELATED OCCUPATIONS	40	1.19	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	10	0.30	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	20	0.59	14.88
ALL OTHER SALES AND RELATED WORKERS	10	0.30	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	680	20.18	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
OPHTHALMIC GOODS
SIC = 385
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.30	14.28
ADJUSTMENT CLERKS	60	1.78	N/A
SECRETARIES	90	2.67	7.97
RECEPTIONISTS AND INFORMATION CLERKS	10	0.30	N/A
TYPISTS	10	0.30	N/A
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.30	N/A
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.30	N/A
FILE CLERKS	10	0.30	34.64
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	60	1.78	6.45
PROCUREMENT CLERKS	10	0.30	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	60	1.78	7.94
PAYROLL AND TIMEKEEPING CLERKS	30	0.89	N/A
BILLING, COST AND RATE CLERKS	20	0.59	N/A
GENERAL OFFICE CLERKS	30	0.89	12.83
BILLING, POSTING, CALCULATING MACH. OPERATORS	10	0.30	N/A
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.59	5.89
DATA ENTRY KEYERS, EXCEPT COMPOSING	40	1.19	N/A
SWITCHBOARD OPERATORS	10	0.30	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	40	1.19	2.70
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	70	2.08	2.02
TRAFFIC, SHIPPING AND RECEIVING CLERKS	70	2.08	5.95
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.30	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	30	0.89	N/A
SERVICE OCCUPATIONS	70	2.08	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.30	N/A
GUARDS AND WATCH GUARDS	10	0.30	N/A
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	60	1.78	7.51
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	2100	62.31	N/A
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	140	4.15	2.07
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.30	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	60	1.78	3.49
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	150	4.45	1.76
MACHINERY MAINTENANCE MECHANICS	10	0.30	7.69
MACHINERY MAINTENANCE WORKERS	10	0.30	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.89	3.03
PRECISION INSTRUMENT REPAIRERS	20	0.59	N/A
ELECTRICIANS	10	0.30	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
OPHTHALMIC GOODS
SIC = 385
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.59	N/A
TOOL AND DIE MAKERS	70	2.08	N/A
MACHINISTS	10	0.30	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.30	N/A
PRECISION OPTICAL GOODS WORKERS	520	15.43	6.18
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	60	1.78	9.11
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	20	0.59	N/A
MILLNG, PLANNG MACH SETTRS & SET-UP OPS, MET, PL	20	0.59	N/A
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	10	0.30	N/A
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	10	0.30	N/A
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	10	0.30	24.49
COMB MACH TOOL OPERATORS AND TENDERS, MET & PLAS	50	1.48	36.27
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	90	2.67	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	290	8.61	N/A
SEWING MACHINE OPERATOR, NON-GARMENT	10	0.30	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	30	0.89	N/A
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	20	0.59	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS,TENDR	10	0.30	N/A
CLEANING, WASHING, PICKLING EQUIPMENT OPS,TENDR	20	0.59	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	60	1.78	15.30
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	20	0.59	16.83
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	10	0.30	N/A
SOLDERERS AND BRAZERS	20	0.59	16.58
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	100	2.97	24.58
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKR	10	0.30	41.45
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	20	0.59	N/A
HAND PACKERS AND PACKAGERS	120	3.56	0.84
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	10	0.30	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.30	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
SIC = 386
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	11010	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1020	9.26	N/A
FINANCIAL MANAGERS	80	0.73	17.00
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	40	0.36	10.81
PURCHASING MANAGERS	40	0.36	14.43
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	90	0.82	32.24
ADMINISTRATIVE SERVICES MANAGERS	40	0.36	8.32
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	60	0.54	21.23
INDUSTRIAL PRODUCTION MANAGERS	80	0.73	10.50
GENERAL MANAGERS AND TOP EXECUTIVES	190	1.73	10.45
ALL OTHER MANAGERS AND ADMINISTRATORS	410	3.72	26.03
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	3280	29.79	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	60	0.54	25.36
BUDGET ANALYSTS	80	0.73	32.85
ALL OTHER FINANCIAL SPECIALISTS	30	0.27	19.72
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	50	0.45	11.92
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	170	1.54	16.52
COST ESTIMATORS	30	0.27	33.53
ALL OTHER MANAGEMENT SUPPORT WORKERS	50	0.45	18.04
CHEMICAL ENGINEERS	40	0.36	13.35
ELECTRICAL AND ELECTRONIC ENGINEERS	360	3.27	10.23
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.27	7.99
MECHANICAL ENGINEERS	130	1.18	11.83
ALL OTHER ENGINEERS	610	5.54	16.22
ELECTRICAL, ELECTRONIC ENGINEERING TECH & TECH	210	1.91	15.06
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.09	N/A
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	360	3.27	16.62
DRAFTERS	240	2.18	16.73
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.09	37.79
PHYSICISTS AND ASTRONOMERS	50	0.45	29.05
CHEMISTS, EXCEEPT BIOCHEMISTS	50	0.45	25.07
ALL OTHER PHYSICAL SCIENTISTS	10	0.09	N/A
CHEMICAL TECHNICIANS & TECHNOLOGISTS, EXC HEALTH	80	0.73	17.02
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	120	1.09	2.56
COMPUTER PROGRAMMERS	100	0.91	8.35
COMPUTER PROGRAMMER AIDES	80	0.73	17.79
PROGRAMMERS - NUMERICAL, TOOL & PROCESS CONTROL	40	0.36	23.13

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
SIC = 386
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
OPER & SYS RESEARCHERS, ANALYSTS, EXC COMPUTER	30	0.27	17.49
ALL OTHER HEALTH PROF., PARAPROF., & TECHS.	10	0.09	N/A
WRITERS AND EDITORS	20	0.18	31.94
TECHNICAL WRITERS	20	0.18	16.66
DESIGNERS, EXCEPT INTERIOR DESIGNERS	110	1.00	18.43
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	100	0.91	N/A
SALES AND RELATED OCCUPATIONS	370	3.36	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.27	42.91
SALES ENGINEERS	30	0.27	30.73
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	10	0.09	35.25
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	280	2.54	37.44
ALL OTHER SALES AND RELATED WORKERS	10	0.09	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1690	15.35	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.45	10.87
ADJUSTMENT CLERKS	60	0.54	10.60
SECRETARIES	550	5.00	9.47
RECEPTIONISTS AND INFORMATION CLERKS	10	0.09	N/A
TYPISTS	10	0.09	49.69
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.18	7.07
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.18	10.16
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	50	0.45	23.23
PROCUREMENT CLERKS	30	0.27	21.39
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	180	1.63	6.62
PAYROLL AND TIMEKEEPING CLERKS	40	0.36	7.89
BILLING, COST AND RATE CLERKS	60	0.54	6.34
GENERAL OFFICE CLERKS	100	0.91	17.34
BILLING, POSTING, CALCULATING MACH. OPERATORS	30	0.27	25.12
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	50	0.45	15.26
ALL OTHER OFFICE MACHINE OPERATORS	10	0.09	N/A
SWITCHBOARD OPERATORS	30	0.27	17.40
PRODUCTION, PLANNING AND EXPEDITING CLERKS	100	0.91	10.87
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	170	1.54	14.05
TRAFFIC, SHIPPING AND RECEIVING CLERKS	80	0.73	9.93
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	10	0.09	N/A
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.18	N/A
SERVICE OCCUPATIONS	350	3.18	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
SIC = 386
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT 1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	80	0.73	18.18
GUARDS AND WATCH GUARDS	180	1.63	2.91
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	100	0.91	6.18
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	4310	39.15	N/A
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	120	1.09	14.16
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	90	0.82	N/A
PRECISION INSPECTORS, TESTERS AND GRADERS	190	1.73	30.88
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	170	1.54	19.48
MACHINERY MAINTENANCE MECHANICS	140	1.27	10.44
MACHINERY MAINTENANCE WORKERS	10	0.09	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	80	0.73	21.29
PRECISION INSTRUMENT REPAIRERS	110	1.00	11.32
CAMERA AND PHOTOGRAPHIC EQUIPMENT REPAIRERS	10	0.09	39.99
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	60	0.54	15.15
CARPENTERS	20	0.18	5.88
ELECTRICIANS	100	0.91	1.03
PAINTERS, PAPERHANGERS,CONSTRUCTION,MAINTENANCE	10	0.09	14.43
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	50	0.45	12.46
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	10	0.09	44.09
TOOL AND DIE MAKERS	50	0.45	14.89
PRECISION INSTRUMENT MAKERS	10	0.09	12.49
MACHINISTS	90	0.82	18.81
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	10	0.09	30.15
SHEET METAL WORKERS	10	0.09	N/A
PRECISION WOODWORKERS	80	0.73	41.92
PRECISION OPTICAL GOODS WORKERS	40	0.36	17.16
LATHE TURNING MACHINE TOOL SETTERS, SET-UP OPS	30	0.27	42.04
NUMERICAL CONTROL MACH TOOL OPS, TNDRS, MET & PL	20	0.18	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	20	0.18	N/A
CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS	60	0.54	14.90
CHEMICAL EQUIPMENT TENDERS	20	0.18	31.94
COATING. PAINTING, SPRAYING MCH SETTRS, SET-UP	30	0.27	21.54
ALL OTHER MACHINE OPERATORS AND TENDERS	100	0.91	N/A
MACHINE BUILDERS, OTHER PRECISION MCH ASSEMBLERS	20	0.18	26.50
ELECTROMECHANICAL EQUIPMENT ASSEMBLERS	30	0.27	11.26
ELECTRICAL, ELECTRONIC EQUIP ASSEMBLERS	20	0.18	29.99
ALL OTHER PRECISION ASSEMBLERS, EXCEPT METAL	10	0.09	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	50	0.45	27.00

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
SIC = 386
REFERENCE DATE APRIL, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
WELDERS AND CUTTERS	10	0.09	19.99
ASSMBLRS,FABRICTRS,EXC MCH ELCTRC,ELCTRNC	2140	19.44	25.83
PLANT AND SYSTEMS OCCUPATIONS	10	0.09	23.57
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKERS	20	0.18	10.18
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	30	0.27	45.50
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.09	N/A
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	90	0.82	13.96
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	150	1.36	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.09	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

Miscellaneous Manufacturing

SIC 39

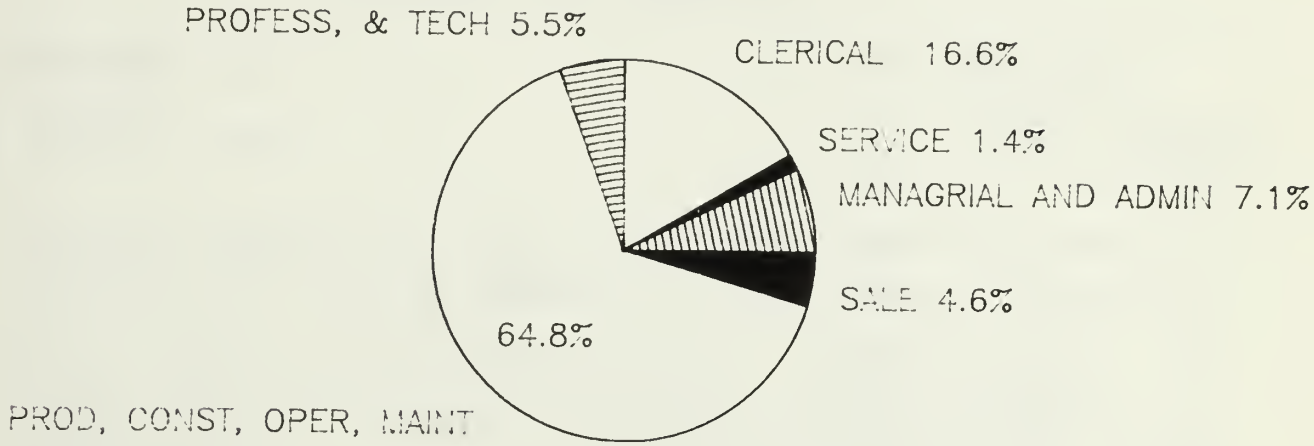
This industry group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing group. This means that some of these industries are too diverse, making comparisons between industries difficult and of questionable value. Analyzing the occupational data at the group level for residual industries may likewise be of questionable value.

This industry group had employment of 22,400 in 1983 and fell to 19,200 in 1986, a loss of 3,200 jobs or approximately a 14.3 percent decline over the 1983-1986 survey time frame.

The occupations within this industry group are largely concentrated within the production, construction, and maintenance occupations with nearly 65 percent of all occupations in this grouping.

MISCELLANEOUS MANUFACTURERS (SIC-39)

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



RANKED OCCUPATIONAL EMPLOYMENT

1.	Assemblers, Fabricators, Except Machine Electrical, Electronic	1770
2.	Hand Packers and Packagers	1010
3.	First Line Supervisors - Production, Operating Workers	640
4.	All Other Machine Operators and Tenders	580
5.	General Managers and Top Executives	580
6.	Plastic Molding, Casting Machine Operators & Tender	530
7.	Grinding and Polishing Workers, Hand	510
8.	Other Sales Representatives, Except Retail	480
9.	Secretaries	410
10.	Traffic, Shipping and Receiving Clerks	410
11.	Precision Hand Workers, Jewelery,Related Products	410

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURERS
SIC = 39
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	19190	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	1360	7.09	N/A
FINANCIAL MANAGERS	100	0.52	11.88
PERSONNEL,TRAINING AND LABOR RELATION MANAGERS	40	0.21	10.26
PURCHASING MANAGERS	60	0.31	10.17
MARKETING,ADVERTISING,PUBLIC RELATIONS MGRS.	140	0.73	10.07
ADMINISTRATIVE SERVICES MANAGERS	20	0.10	26.09
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	60	0.31	6.35
INDUSTRIAL PRODUCTION MANAGERS	290	1.51	21.11
GENERAL MANAGERS AND TOP EXECUTIVES	580	3.02	16.98
ALL OTHER MANAGERS AND ADMINISTRATORS	70	0.36	11.27
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	1050	5.47	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	150	0.78	25.17
BUDGET ANALYSTS	60	0.31	3.64
ALL OTHER FINANCIAL SPECIALISTS	30	0.16	20.00
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	60	0.31	27.87
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	30	0.16	3.57
COST ESTIMATORS	30	0.16	22.58
ALL OTHER MANAGEMENT SUPPORT WORKERS	40	0.21	12.82
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	50	0.26	5.77
MECHANICAL ENGINEERS	40	0.21	7.32
ALL OTHER ENGINEERS	20	0.10	4.76
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.05	18.18
MECHANICAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.05	37.50
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	70	0.36	N/A
PHYSICAL SCIENTISTS	10	0.05	N/A
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	20	0.10	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	60	0.31	3.28
COMPUTER PROGRAMMERS	30	0.16	12.12
COMPUTER PROGRAMMER AIDES	10	0.05	12.50
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.05	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	270	1.41	30.19
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	50	0.26	18.75
SALES AND RELATED OCCUPATIONS	880	4.59	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	120	0.63	21.01

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURERS
SIC = 39
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SALES REPS,SCIENTIFIC PROD & SVCS EXC RETAIL	60	0.31	21.67
OTHER SALES REPRESENTATIVES,EXCEPT RETAIL	480	2.50	26.04
ALL OTHER SALES AND RELATED WORKERS	220	1.15	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	3190	16.62	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	170	0.89	11.38
ADJUSTMENT CLERKS	140	0.73	16.18
SECRETARIES	410	2.14	16.67
RECEPTIONISTS AND INFORMATION CLERKS	30	0.16	11.11
TYPISTS	30	0.16	18.75
TYPISTS, WORD PROCESSING EQUIPMENT	20	0.10	13.64
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	20	0.10	5.26
FILE CLERKS	40	0.21	7.32
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	250	1.30	20.24
PROCUREMENT CLERKS	30	0.16	6.06
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	310	1.62	26.23
PAYROLL AND TIMEKEEPING CLERKS	100	0.52	7.84
BILLING, COST AND RATE CLERKS	70	0.36	10.29
GENERAL OFFICE CLERKS	250	1.30	22.58
BILLING, POSTING, CALCULATING MACH. OPERATORS	40	0.21	20.00
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	70	0.36	10.61
DATA ENTRY KEYERS, EXCEPT COMPOSING	110	0.57	12.84
ALL OTHER OFFICE MACHINE OPERATORS	10	0.05	33.33
SWITCHBOARD OPERATORS	40	0.21	4.76
PRODUCTION, PLANNING AND EXPEDITING CLERKS	290	1.51	6.48
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	60	0.31	5.36
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	190	0.99	13.99
TRAFFIC, SHIPPING AND RECEIVING CLERKS	410	2.14	16.55
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	70	0.36	21.92
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	0.26	13.46
SERVICE OCCUPATIONS	260	1.35	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	20	0.10	5.88
GUARDS AND WATCH GUARDS	90	0.47	5.38
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	140	0.73	20.29
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.05	20.00
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD,CONSTR,OPERATING,MAINT & MATL HANDL OCCS	12440	64.83	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURERS
SIC = 39
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	80	0.42	15.66
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	640	3.34	12.89
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	20	0.10	15.00
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	110	0.57	40.71
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.10	23.81
PRECISION INSPECTORS, TESTERS AND GRADERS	50	0.26	14.89
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	400	2.08	13.15
MACHINERY MAINTENANCE MECHANICS	140	0.73	15.49
MACHINERY MAINTENANCE WORKERS	40	0.21	11.11
MAINTENANCE REPAIRERS, GENERAL UTILITY	90	0.47	14.89
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	20	0.10	N/A
CARPENTERS	190	0.99	46.81
ELECTRICIANS	60	0.31	15.87
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.05	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	30	0.16	N/A
TOOL AND DIE MAKERS	190	0.99	23.16
MACHINISTS	180	0.94	31.82
TOOL GRNDRS,FLRS,SHRPNRS,OTHR PRECISION WORKR	130	0.68	34.11
JEWELERS AND SILVERSMITHS	210	1.09	28.29
PRECISION HAND WORKERS,JEWELERY,RELATED PRODUC	410	2.14	35.85
PRECISION ETCHERS AND ENGRAVERS, HAND OR MACHINE	100	0.52	10.53
ALL OTHER PRECISION METAL WORKERS	130	0.68	N/A
WOOD MACHINISTS	10	0.05	N/A
CABINETMAKERS AND BENCH CARPENTERS	110	0.57	42.48
ALL OTHER PRECISION WOODWORKERS	100	0.52	N/A
PRECISION MLDRS, SHPRS, CSTRS, CRVRS, EXC JEWELR	170	0.89	31.52
PREC PATTERNMKRS, MODEL MAKRS, LAYT WORKRS, CUTT	30	0.16	21.88
GEM AND DIAMOND WORKERS	50	0.26	N/A
ALL OTHER PRECISION METAL WORKERS	60	0.31	N/A
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	60	0.31	4.69
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	170	0.89	31.33
MACHINE TOOL CUTTING OPERATORS AND TENDERS	300	1.56	45.08
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	220	1.15	33.95
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	60	0.31	37.29
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	530	2.76	26.23
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	50	0.26	18.87
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	120	0.63	5.79
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	10	0.05	33.33
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	80	0.42	32.53
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	200	1.04	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURERS
SIC = 39
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	360	1.88	N/A
SAWING MACHINE OPERATORS AND TENDERS	30	0.16	N/A
WOODWORKING MACHINE SETTERS AND SET-UP OPERATORS	10	0.05	N/A
WOODWORKING MACHINE OPERATORS AND TENDERS	20	0.10	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	80	0.42	5.13
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	60	0.31	49.12
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	30	0.16	N/A
PRINTING PRESS MACHINE OPERATORS AND TENDERS	90	0.47	45.45
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	10	0.05	36.36
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	40	0.21	22.22
COATING, PAINTING,SPRAYING MCH SETTRS, SET-UP	20	0.10	26.67
COATING, PAINTING,SPRAYING MCH OPERATORS, TENDR	140	0.73	37.68
CLEANING, WASHING,PICKLING EQUIPMENT OPS, TENDR	30	0.16	16.67
CRUSHNG, GRINDNG,MIXNG & BLENDING MCH OPS, TNDR	50	0.26	13.04
EXTRUDING AND OTHER MACHINE OPERATORS	60	0.31	17.19
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	150	0.78	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	580	3.02	N/A
ALL OTHER PRECISION ASSEMBLERS	10	0.05	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	60	0.31	45.76
SOLDERERS AND BRAZERS	140	0.73	41.55
HAND CUTTERS AND TRIMMERS	70	0.36	25.76
HAND MOLDERS AND CASTERS	60	0.31	32.14
HAND PAINTING AND RELATED WORKERS	260	1.35	31.15
HAND ENGRAVING AND PRINTINT WORKERS	50	0.26	24.49
GRINDING AND POLISHING WORKERS, HAND	510	2.66	33.60
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	1770	9.22	18.38
ALL OTHER HAND WORKERS	180	0.94	N/A
PLANT AND SYSTEMS OCCUPATIONS	30	0.16	10.71
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	20	0.10	6.25
TRUCK DRIVERS, LIGHT, INCL DELIVERY, ROUTE WORKR	50	0.26	35.42
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.05	16.67
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	70	0.36	4.29
CONVEYOR OPERATORS AND TENDERS	10	0.05	40.00
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	30	0.16	46.15
MECHANIC AND REPAIRER HELPERS	20	0.10	17.39
MACHINE FEEDERS AND OFFBEARERS	210	1.09	38.16
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	280	1.46	26.09
HAND PACKERS AND PACKAGERS	1010	5.26	21.17
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	330	1.72	31.31

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
JEWELRY, SILVERWARE AND PLATED WARE
SIC = 391
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	7340	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	490	6.68	N/A
FINANCIAL MANAGERS	50	0.68	6.66
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	20	0.27	7.07
PURCHASING MANAGERS	20	0.27	15.05
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	80	1.09	8.71
ADMINISTRATIVE SERVICES MANAGERS	10	0.14	N/A
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.41	6.66
INDUSTRIAL PRODUCTION MANAGERS	110	1.50	18.24
GENERAL MANAGERS AND TOP EXECUTIVES	170	2.32	11.97
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.14	39.76
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	440	5.99	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	50	0.68	13.99
BUDGET ANALYSTS	50	0.68	4.14
ALL OTHER FINANCIAL SPECIALISTS	10	0.14	24.05
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.27	13.15
PERSONNEL, TRAINING, LABOR RELATIONS SPEC	20	0.27	6.73
COST ESTIMATORS	20	0.27	25.34
ALL OTHER MANAGEMENT SUPPORT WORKERS	20	0.27	24.20
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	30	0.41	11.29
MECHANICAL ENGINEERS	10	0.14	14.28
ALL OTHER ENGINEERS	10	0.14	19.99
INDUSTRIAL ENGINEERING TECHNICIANS & TECHNOL.	10	0.14	22.36
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	40	0.54	N/A
PHYSICAL SCIENTISTS	10	0.14	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	30	0.41	3.22
COMPUTER PROGRAMMERS	20	0.27	17.63
DESIGNERS, EXCEPT INTERIOR DESIGNERS	80	1.09	11.32
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	30	0.41	N/A
SALES AND RELATED OCCUPATIONS	270	3.68	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	40	0.54	15.74
SALES REPS, SCIENTIFIC PROD & SVCS EXC RETAIL	50	0.68	13.60
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	140	1.91	31.45
ALL OTHER SALES AND RELATED WORKERS	30	0.41	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
JEWELRY, SILVERWARE AND PLATED WARE
SIC = 391
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	1540	20.98	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	100	1.36	11.47
ADJUSTMENT CLERKS	60	0.82	18.55
SECRETARIES	170	2.32	10.73
RECEPTIONISTS AND INFORMATION CLERKS	10	0.14	20.20
TYPISTS	10	0.14	30.04
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.14	19.99
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.14	11.11
FILE CLERKS	30	0.41	7.90
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	170	2.32	10.45
PROCUREMENT CLERKS	20	0.27	7.44
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	100	1.36	12.49
PAYROLL AND TIMEKEEPING CLERKS	70	0.95	10.90
BILLING, COST AND RATE CLERKS	50	0.68	8.69
GENERAL OFFICE CLERKS	50	0.68	23.36
BILLING, POSTING, CALCULATING MACH. OPERATORS	20	0.27	8.33
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	40	0.54	15.75
DATA ENTRY KEYERS, EXCEPT COMPOSING	80	1.09	9.93
ALL OTHER OFFICE MACHINE OPERATORS	10	0.14	33.33
SWITCHBOARD OPERATORS	20	0.27	7.44
PRODUCTION, PLANNING AND EXPEDITING CLERKS	210	2.86	3.18
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	30	0.41	10.20
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	100	1.36	8.15
TRAFFIC, SHIPPING AND RECEIVING CLERKS	160	2.18	15.87
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	0.54	9.89
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	*	N/A	N/A
SERVICE OCCUPATIONS	150	2.04	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.14	14.14
GUARDS AND WATCH GUARDS	70	0.95	7.69
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	60	0.82	12.90
ALL OTHER SERVICE WORKERS	10	0.14	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	4450	60.63	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	40	0.54	25.60
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	230	3.13	8.95
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.41	28.67
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	10	0.14	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
JEWELRY, SILVERWARE AND PLATED WARE
SIC = 391
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
PRECISION INSPECTORS, TESTERS AND GRADERS	30	0.41	14.90
PROD INSPS, TSTRS, GRDRS, SORTRS, SAMPLRS, WEIGH	140	1.91	7.01
MACHINERY MAINTENANCE MECHANICS	30	0.41	13.85
MACHINERY MAINTENANCE WORKERS	10	0.14	31.49
MAINTENANCE REPAIRERS, GENERAL UTILITY	40	0.54	6.44
CARPENTERS	10	0.14	31.42
ELECTRICIANS	20	0.27	9.72
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.14	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.27	N/A
TOOL AND DIE MAKERS	150	2.04	17.18
MACHINISTS	60	0.82	14.43
TOOL GRNDRS, FLRS, SHRPNRS, OTHR PRECISION WORKR	100	1.36	25.40
JEWELERS AND SILVERSMITHS	210	2.86	28.13
PRECISION HAND WORKERS, JEWELERY, RELATED PRODUC	360	4.90	26.85
PRECISION ETCHERS AND ENGRAVERS, HAND OR MACHINE	80	1.09	3.99
ALL OTHER PRECISION METAL WORKERS	20	0.27	30.82
PATTERN AND MODEL MAKERS, WOOD	10	0.14	33.33
PRECISION MLDRS, SHPRS, CSTRS, CRVRS, EXC JEWELR	40	0.54	10.85
GEM AND DIAMOND WORKERS	50	0.68	N/A
DRLLNG, BRNG MACH TOOL STTRS, ST-UP OPS, MET, PL	60	0.82	5.18
GRINDNG, LAPPNG, BUFFNG MCH TOOL STTRS, SET-UP	160	2.18	28.68
MACHINE TOOL CUTTING OPERATORS AND TENDERS	160	2.18	33.99
PUNCHING MACHINE SETTERS AND SET-UP OPERATORS	70	0.95	43.21
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	120	1.63	26.13
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	10	0.14	N/A
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	20	0.27	N/A
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	40	0.54	24.99
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	30	0.41	25.75
ELECTROLYTIC PLATNG, COATNG MCH SETTRS, SET-UP	10	0.14	15.74
ELECTROLYTIC PLTNG, CTNG MCH OPS, TNDRS, MET, PL	80	1.09	26.29
NONELECTROLYTIC PLATNG, COATNG MCH OPS & TENDERS	10	0.14	40.82
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	50	0.68	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	340	4.63	1.51
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	20	0.27	N/A
ALL OTHER PRINTING RELATED OPERATORS AND TENDERS	40	0.54	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	20	0.27	36.44
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	20	0.27	15.07
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	10	0.14	49.48
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	20	0.27	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	30	0.41	N/A
SOLDERERS AND BRAZERS	110	1.50	12.85

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
JEWELRY, SILVERWARE AND PLATED WARE
SIC = 391
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
HAND CUTTERS AND TRIMMERS	10	0.14	N/A
HAND PAINTING AND RELATED WORKERS	140	1.91	17.25
HAND ENGRAVING AND PRINTINT WORKERS	50	0.68	18.59
GRINDING AND POLISHING WORKERS, HAND	400	5.45	25.97
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	300	4.09	24.53
ALL OTHER HAND WORKERS	30	0.41	N/A
PLANT AND SYSTEMS OCCUPATIONS	20	0.27	13.22
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKR	20	0.27	42.43
ALL OTHER TRANSPORTERS AND MATERIAL MOVERS	10	0.14	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.14	N/A
MECHANIC AND REPAIRER HELPERS	10	0.14	23.57
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	30	0.41	26.00
HAND PACKERS AND PACKAGERS	270	3.68	9.72
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	50	0.68	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TOYS AND SPORTING GOODS
SIC = 394
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	5790	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	350	6.04	N/A
FINANCIAL MANAGERS	30	0.52	7.69
PERSONNEL, TRAINING AND LABOR RELATION MANAGERS	10	0.17	11.78
PURCHASING MANAGERS	20	0.35	9.31
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	40	0.69	7.35
ADMINISTRATIVE SERVICES MANAGERS	10	0.17	20.20
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	30	0.52	N/A
INDUSTRIAL PRODUCTION MANAGERS	80	1.38	16.53
GENERAL MANAGERS AND TOP EXECUTIVES	80	1.38	12.90
ALL OTHER MANAGERS AND ADMINISTRATORS	50	0.86	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	330	5.70	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	40	0.69	17.51
ALL OTHER FINANCIAL SPECIALISTS	10	0.17	N/A
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	20	0.35	12.59
ALL OTHER MANAGEMENT SUPPORT WORKERS	30	0.52	N/A
INDUSTRIAL ENGINEERS, EXCEPT SAFETY	20	0.35	N/A
MECHANICAL ENGINEERS	30	0.52	N/A
ALL OTHER ENGINEERS	20	0.35	N/A
DRAFTERS	10	0.17	N/A
ALL OTHER ENG & RELATED TECHNICIANS & TECHNOL.	10	0.17	N/A
PHYSICAL SCIENTISTS	10	0.17	N/A
PHYSICAL, LIFE SCIENCE TECHNICIANS & TECHNOL.	20	0.35	N/A
SYSTEMS ANALYSTS, ELECTRONIC DATA PROCESSING	30	0.52	5.05
COMPUTER PROGRAMMERS	20	0.35	8.83
HEALTH PRACTITIONERS, TECHNOLOGISTS, TECHNICIANS	10	0.17	N/A
DESIGNERS, EXCEPT INTERIOR DESIGNERS	40	0.69	23.83
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.35	N/A
SALES AND RELATED OCCUPATIONS	320	5.53	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	30	0.52	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	230	3.97	22.05
ALL OTHER SALES AND RELATED WORKERS	60	1.04	14.62
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	880	15.20	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TOYS AND SPORTING GOODS
SIC = 394
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	50	0.86	5.29
ADJUSTMENT CLERKS	40	0.69	14.84
SECRETARIES	110	1.90	3.30
RECEPTIONISTS AND INFORMATION CLERKS	20	0.35	11.54
TYPISTS	20	0.35	13.60
TYPISTS, WORD PROCESSING EQUIPMENT	10	0.17	17.67
PERSONNEL CLERKS, EXCEPT PAYROLL, TIMEKEEPING	10	0.17	N/A
FILE CLERKS	10	0.17	17.67
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	40	0.69	22.05
PROCUREMENT CLERKS	10	0.17	17.67
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	80	1.38	23.81
PAYROLL AND TIMEKEEPING CLERKS	20	0.35	N/A
BILLING, COST AND RATE CLERKS	10	0.17	N/A
GENERAL OFFICE CLERKS	70	1.21	18.48
BILLING, POSTING, CALCULATING MACH. OPERATORS	10	0.17	43.59
COMPUTER OPERATORS, EXCEPT PERIPHERAL EQUIPMENT	20	0.35	7.07
DATA ENTRY KEYERS, EXCEPT COMPOSING	30	0.52	15.71
SWITCHBOARD OPERATORS	10	0.17	11.78
PRODUCTION, PLANNING AND EXPEDITING CLERKS	60	1.04	11.98
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.17	N/A
STOCK CLERKS- STOCKROOM, WAREHOUSE, STORAGE YARD	90	1.55	19.13
TRAFFIC, SHIPPING AND RECEIVING CLERKS	80	1.38	15.33
ALL OTHER MATERIAL RECORDING, SCHEDULING, ETC	40	0.69	33.28
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	50	0.86	14.14
SERVICE OCCUPATIONS	60	1.04	N/A
1ST LINE SUPERVISORS, MANAGER-SUPERS - SERVICE	10	0.17	N/A
GUARDS AND WATCH GUARDS	20	0.35	N/A
JANITORS & CLEANERS,EXCEPT MAIDS & HOUSE CLEANERS	30	0.52	22.22
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD, CONSTR, OPERATING, MAINT & MATL HANDL OCCS	3860	66.67	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	20	0.35	5.89
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	120	2.07	4.71
1ST LINE SUPERS - TRANS, MATERIAL MOVNG MACHINE	10	0.17	24.32
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	30	0.52	37.88
PRECISION INSPECTORS, TESTERS AND GRADERS	10	0.17	N/A
PROD INSPS,TSTRS,GRDRS,SORTRS,SAMPLRS,WEIGH	220	3.80	4.56
MACHINERY MAINTENANCE MECHANICS	60	1.04	5.54

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TOYS AND SPORTING GOODS
SIC = 394
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINERY MAINTENANCE WORKERS	10	0.17	N/A
MAINTENANCE REPAIRERS, GENERAL UTILITY	30	0.52	14.72
ALL OTHER MECHANICS, INSTALLERS AND REPAIRERS	20	0.35	N/A
ELECTRICIANS	20	0.35	N/A
PLUMBERS, PIPEFITTERS AND STEAMFITTERS	10	0.17	N/A
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.35	N/A
TOOL AND DIE MAKERS	30	0.52	25.92
MACHINISTS	50	0.86	N/A
PRECISION ETCHERS AND ENGRAVERS, HAND OR MACHINE	10	0.17	N/A
WOOD MACHINISTS	10	0.17	N/A
PRECISION MLDRS, SHPRS, CSTRS, CRVRS, EXC JEWELR	10	0.17	N/A
ALL OTHER PRECISION METAL WORKERS	10	0.17	N/A
MACHINE TOOL CUTTING OPERATORS AND TENDERS	30	0.52	37.62
MACHINE FORMING OPERATORS & TENDERS, METAL & PLA	60	1.04	18.64
PLASTIC MOLDNG & CASTNG MACHNE SETTERS, SET-UP	40	0.69	14.56
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	380	6.56	25.44
MET MOLDNG, COREMKNG, CASTNG MCH STTRS, SET-UP	10	0.17	N/A
METAL MOLDING, COREMKNG, CASTNG MCH OPS & TENDER	90	1.55	N/A
SAWING MACHINE OPERATORS AND TENDERS	30	0.52	N/A
WOODWORKING MACHINE SETTERS AND SET-UP OPERATORS	10	0.17	N/A
WOODWORKING MACHINE OPERATORS AND TENDERS	20	0.35	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	50	0.86	N/A
A O PRINTING RELATED SETTERS, SET-UP OPERATORS	30	0.52	N/A
CUTTING AND SLICING MACHINE OPERATORS AND TENDER	40	0.69	23.03
COATING, PAINTING, SPRAYING MCH SETTRS, SET-UP	10	0.17	N/A
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	50	0.86	10.65
CLEANING, WASHING, PICKLING EQUIPMENT OPS, TENDR	10	0.17	N/A
CRUSHNG, GRINDNG, MIXNG & BLENDING MCH OPS, TNDR	20	0.35	N/A
EXTRUDING AND OTHER MACHINE OPERATORS	40	0.69	N/A
ALL OTHER MACHINE SETTERS AND SET-UP OPERATORS	130	2.25	N/A
ALL OTHER MACHINE OPERATORS AND TENDERS	380	6.56	N/A
ELECTRICAL AND ELECTRONIC ASSEMBLERS	10	0.17	N/A
HAND CUTTERS AND TRIMMERS	50	0.86	18.94
HAND MOLDERS AND CASTERS	10	0.17	N/A
HAND PAINTING AND RELATED WORKERS	20	0.35	40.12
GRINDING AND POLISHING WORKERS, HAND	50	0.86	22.98
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	750	12.95	11.39
ALL OTHER HAND WORKERS	100	1.73	N/A
PLANT AND SYSTEMS OCCUPATIONS	10	0.17	N/A
TRUCK DRIVERS, HEAVY OR TRACTOR TRAILER	10	0.17	14.14
TRUCK DRIVERS,LIGHT,INCL DELIVERY,ROUTE WORKRS	20	0.35	29.31

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
TOYS AND SPORTING GOODS
SIC = 394
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER TRANSPORTATION AND RELATED WORKERS	10	0.17	20.20
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	60	1.04	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.17	N/A
MECHANIC AND REPAIRER HELPERS	20	0.35	18.60
MACHINE FEEDERS AND OFFBEARERS	30	0.52	11.31
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	200	3.45	25.85
HAND PACKERS AND PACKAGERS	340	5.87	23.46
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	90	1.55	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	*	N/A	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COSTUME JEWELRY AND NOTIONS
SIC = 396
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	1100	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	80	7.27	N/A
FINANCIAL MANAGERS	10	0.91	19.24
PURCHASING MANAGERS	10	0.91	N/A
INDUSTRIAL PRODUCTION MANAGERS	20	1.82	29.35
GENERAL MANAGERS AND TOP EXECUTIVES	40	3.64	46.16
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.91	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	50	4.55	N/A
ALL OTHER FINANCIAL SPECIALISTS	10	0.91	N/A
INDUSTRIAL ENGINEERS,EXCEPT SAFETY	10	0.91	N/A
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	40	3.64	N/A
SALES AND RELATED OCCUPATIONS	120	10.91	N/A
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	10	0.91	46.90
ALL OTHER SALES AND RELATED WORKERS	110	10.00	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	110	10.00	N/A
ADJUSTMENT CLERKS	10	0.91	28.86
ALL OTHER SECRETARIES	20	1.82	N/A
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	20	1.82	25.78
PAYROLL AND TIMEKEEPING CLERKS	10	0.91	N/A
GENERAL OFFICE CLERKS	20	1.82	19.76
ALL OTHER OFFICE MACHINE OPERATORS	10	0.91	N/A
SWITCHBOARD OPERATORS	10	0.91	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.91	19.24
WEIGHERS, MEASURERS, CHECKERS, SAMPLERS	10	0.91	N/A
TRAFFIC, SHIPPING AND RECEIVING CLERKS	10	0.91	28.86
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	1.82	N/A
SERVICE OCCUPATIONS	10	0.91	N/A
A O CLEANING & BUILDING SERV WORKERS, X PRIV HSH	10	0.91	N/A
PROD,CONSTR,OPERATING,MAINT & MATL HANDL OCCS	740	67.27	N/A

1 - SUMMED PARTS MAY NOT EQUAL TOTALS BECAUSE OF ROUNDING.
** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
COSTUME JEWELRY AND NOTIONS
SIC = 396
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRERS	10	0.91	28.86
1ST LINE SUPERS - PRODUCTION, OPERATING WORKERS	50	4.55	35.99
ALL OTHER MACHINERY MAINTENANCE MECHANICS	20	1.82	N/A
ALL OTHER PRECISION METAL WORKERS	40	3.64	N/A
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	30	2.73	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	10	0.91	N/A
COATING,PAINTING,SPRAYING MCH OPERATORS,TENDR	20	1.82	8.83
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	110	10.00	31.97
ALL OTHER HAND WORKERS	100	9.09	N/A
HAND PACKERS AND PACKAGERS	180	16.36	28.69
ALL OTHER HELPERS, LABORERS, MATERIAL MOVERS	170	15.45	N/A
ALL OTHER CONSTRUCTION, MECHANICS, REPAIRERS ETC	10	0.91	N/A

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURES
SIC = 399
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
TOTAL INDUSTRY EMPLOYMENT	3800	100.00	N/A
MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS	310	8.16	N/A
FINANCIAL MANAGERS	10	0.26	10.10
PURCHASING MANAGERS	10	0.26	14.28
MARKETING, ADVERTISING, PUBLIC RELATIONS MGRS.	10	0.26	11.78
ADMINISTRATIVE SERVICES MANAGERS	10	0.26	14.28
ENGINEERING, MATH, MATERIALS SCIENCE MGRS.	10	0.26	N/A
INDUSTRIAL PRODUCTION MANAGERS	50	1.32	11.31
GENERAL MANAGERS AND TOP EXECUTIVES	210	5.53	18.89
ALL OTHER MANAGERS AND ADMINISTRATORS	10	0.26	N/A
PROFESSIONAL, PARAPROFESSIONAL, TECH OCCUPATION	150	3.95	N/A
ACCOUNTANTS, AUDITORS & OTHER FINANCIAL SPEC.	40	1.05	28.85
PURCH AGENTS, EXC WHOLESALE, RETAIL & FARM	10	0.26	39.22
ALL OTHER MANAGEMENT SUPPORT WORKERS	10	0.26	N/A
DRAFTERS	10	0.26	37.79
DESIGNERS, EXCEPT INTERIOR DESIGNERS	70	1.84	24.47
ALL OTHER PROFESSIONAL, PARAPROF., & TECHNICAL	20	0.53	N/A
SALES AND RELATED OCCUPATIONS	160	4.21	N/A
FIRST LINE SUPERVISORS, MANAGERS/SUPVS - SALES	20	0.53	6.66
OTHER SALES REPRESENTATIVES, EXCEPT RETAIL	90	2.37	22.63
ALL OTHER SALES AND RELATED WORKERS	60	1.58	N/A
CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS	470	12.37	N/A
SUPERVISOR & MGR/SUPVR-CLERICAL/ADMIN SUPPORT	10	0.26	11.11
ADJUSTMENT CLERKS	20	0.53	9.11
SECRETARIES	70	1.84	26.08
ORDER CLERKS - MATERIALS, MERCHANDISE, SERVICE	10	0.26	16.66
BOOKKEEPING, ACCOUNTING AND AUDITING CLERKS	100	2.63	37.06
PAYROLL AND TIMEKEEPING CLERKS	10	0.26	N/A
BILLING, COST AND RATE CLERKS	10	0.26	12.49
GENERAL OFFICE CLERKS	80	2.11	21.77
SWITCHBOARD OPERATORS	10	0.26	N/A
PRODUCTION, PLANNING AND EXPEDITING CLERKS	10	0.26	7.14
TRAFFIC, SHIPPING AND RECEIVING CLERKS	130	3.42	12.62

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** - EMPLOYMENT LESS THAN 10
N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURES
SIC = 399
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
ALL OTHER CLERICAL & ADMIN SUPPORT WORKERS	20	0.53	N/A
SERVICE OCCUPATIONS	20	0.53	N/A
JANITORS & CLEANERS,EXC.MAIDS & HOUSE CLEANERS	10	0.26	27.66
ALL OTHER SERVICE WORKERS	*	N/A	N/A
PROD,CONSTR,OPERATING,MAINT & MATL HANDL OCCS	2690	70.79	N/A
1ST LINE SUPERS - MECHANICS,INSTALLERS,REPAIRER	10	0.26	7.69
1ST LINE SUPERS - PRODUCTION,OPERATING WORKERS	180	4.74	14.11
1ST LINE SUPERS - HLPRS, LABRRS, MATL MOVERS	50	1.32	49.51
A O 1ST LINE SUPERS - PROD, CONSTR, MAINTENANCE	20	0.53	N/A
ALL OTHER INSPECTORS,TESTERS,RELATED OCCUPATIONS	40	1.05	N/A
MACHINERY MAINTENANCE MECHANICS	40	1.05	9.36
MACHINERY MAINTENANCE WORKERS	10	0.26	10.87
MAINTENANCE REPAIRERS, GENERAL UTILITY	20	0.53	24.20
CARPENTERS	130	3.42	43.67
ELECTRICIANS	20	0.53	47.78
A O CONSTRUCTION, EXTRACTIVE WORKERS, EXC HELPER	20	0.53	N/A
ALL OTHER PRECISION METAL WORKERS	160	4.21	N/A
CABINETMAKERS AND BENCH CARPENTERS	60	1.58	41.14
ALL OTHER PRECISION WOODWORKERS	100	2.63	N/A
PRECISION MLDRS, SHPRS, CSTRS, CRVRS, EXC JEWELR	100	2.63	47.69
PREC PATTERNMKRS, MODEL MAKRS, LAYT WORKRS, CUTT	30	0.79	21.15
ALL OTHER PRECISION METAL WORKERS	30	0.79	21.16
PLASTIC MOLDING, CASTING MACH OPERATORS & TENDER	130	3.42	26.43
A O METAL, PLASTIC MACH SETTERS, SET-UP OPERATOR	50	1.32	N/A
A O METAL & PLASTIC MACHINE OPERATORS AND TENDER	120	3.16	N/A
PRINTING PRESS MACHINE SETTERS, SET-UP OPERATORS	20	0.53	19.04
SCREEN PRINTING MACHINE SETTERS, SET-UP OPERATOR	30	0.79	28.12
PRINTING PRESS MACHINS OPERATORS AND TENDERS	10	0.26	47.38
COATING, PAINTING, SPRAYING MCH OPERATORS, TENDR	50	1.32	49.19
PACKAGING, FILLING MACHINE OPERATORS AND TENDERS	40	1.05	49.49
ALL OTHER MACHINE OPERATORS AND TENDERS	120	3.16	N/A
HAND PAINTING AND RELATED WORKERS	60	1.58	38.69
ASSMBLRS, FABRICTRS, EXC MCH ELCTRC, ELCTRNC	550	14.47	18.54
ALL OTHER HAND WORKERS	80	2.11	N/A
ALL OTHER MOTOR VEHICLE OPERATORS	10	0.26	N/A
INDUSTRIAL TRUCK AND TRACTOR OPERATORS	10	0.26	N/A
ALL OTHER MATERIAL MOVING EQUIPMENT OPERATORS	10	0.26	N/A

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N/A - NOT AVAILABLE

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURES
SIC = 399
REFERENCE DATE MAY, 1986

OCCUPATIONAL TITLE	EMPLOYMENT		
	1 NUMBER	PERCENT OF TOTAL	RELATIVE ERROR %
MACHINE FEEDERS AND OFFBEARERS	120	3.16	31.04
FREIGHT, STOCK AND MATERIAL MOVERS, HAND	50	1.32	23.91
HAND PACKERS AND PACKAGERS	220	5.79	25.26
ALL OTHER HELPERS,LABORERS,MATERIAL MOVERS	50	1.32	12.69
ALL OTHER CONSTRUCTION,MECHANICS,REPAIRERS ETC	*	N/A	N/A

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N/A - NOT AVAILABLE

THE MAJOR OCCUPATIONAL CATEGORIES USED IN THE
OCCUPATIONAL EMPLOYMENT STATISTICS SURVEY

DESCRIPTION

MANAGERIAL AND ADMINISTRATIVE OCCUPATIONS

Include in this division top and middle-level managers, administrators, and executives. Primary duties are policy making, planning, staffing, directing or controlling the activities of industrial, commercial, governmental or other establishments.....Organization of this section- Occupations in this section are ordered functionally as follows: Staff and administrative managerial; industry specific managerial; and a residual 'All Other' category.....Special instructions - Exclude first-line supervisors and managers with first-line duties. These workers, if professional, paraprofessional or technical, should be reported with the workers they supervise. All other supervisors and manager/supervisors should be reported in separate categories provided in each division. Exclude owners and partners of unincorporated firms. Include only managers and administrators who are exempt from the minimum wage and overtime provision of the Fair Labor Standards Act.

PROFESSIONAL, PARAPROFESSIONAL,AND TECHNICAL OCCUPATIONS

Include in this division persons concerned with the theoretical or practical aspects of such fields as science, art, education, law and business relations where substantial post-secondary educational preparation, or equivalent on-the-job training or experience is required.....Organization of this section - occupations in this section are ordered functionally as follows: General management support; engineering and scientific; data processing and and mathematical; social science; law and related; teaching and related; medicine and health; writing, art, and related; and a residual 'All Other'.....Special instructions - Quality Control Workers should be reported according to the nature of the quality control process (i.e. chemical, mechanical, biological). Thus, an Engineer engaged in quality control work of a chemical nature should be reported as a Chemical Engineer.....Unlike the other divisions of this form, first-line supervisors and managers with first-line duties should be reported along with the workers they supervise.

SALES AND RELATED OCCUPATIONS

Include in this division persons selling goods or services and others directly related to sales.....Organization of this section - Occupations in this section are ordered functionally as follows: Supervising; sales of services; commodity sales; and a residual 'All Other' category.....Special instructions - Managers of smaller establishments who typically have first-line supervisory duties and engage in the same activities as the workers they supervise should be reported in the First Line Supervisors and Manager/Supervisors occupation.

CLERICAL AND ADMINISTRATIVE SUPPORT OCCUPATIONS

Include in this division persons performing office and plant clerical tasks, such as typing, filing, computer operating, records keeping (personnel, stock, production, billing, etc.); and mail preparation and distributing.....Organization of this section - Occupations in this section are ordered functionally as follows: Supervising; unique and industry specific (occupations); secretarial and general office; office machine operating; communications and mail distributing; material recording and other production related; and a residual 'All Other' category.

SERVICE OCCUPATIONS

Include in this division workers in occupations relating to protective service, food service, health assisting service, cleaning and building service, and personal service.....Organization of this section - Occupations in this section are ordered functionally as follows: Supervising; protective services; food services; health; cleaning; personal services; and a residual 'All Other' category.

AGRICULTURAL,FORESTRY, FISHING, & RELATED OCCUPATIONS

Include in this Division workers concerned with agricultural production, forestry, and fishing. Also included in this division are agriculture related workers such as animal caretakers and groundskeepers.....Organization of this section - Occupation in this section are ordered functionally as follows: Supervising, forestry; and a residual 'All Other' category that covers fishing and agricultural production.....Special instructions - Machine and manual occupations that are found in, but not unique to, the forestry industry are found in the next Division.

PRODUCTION, CONSTRUCTION, OPERATING, MAINTENANCE, AND MATERIAL HANDLING OCCUPATIONS

Include in this Division all skilled, semiskilled, and unskilled workers performing machine and manual tasks involving production, construction, operating, maintenance, repair, and material handling operations .....Organization of this section - Occupations in this section are as follows: Supervising; inspecting; repair; construction; precision production; machine setting, operating, and tending; assembling and hand working; plant and system operation; transportation and material moving equipment operating; and helpers, laboring, and manual material moving.....Special instructions - Because of the differing experience and training required, production workers performing precision tasks (whether hand or machine) are reported separately. In addition, the remaining production worker groups are divided between machine and manual operations. The use of hand held power tools is considered a manual operation for the purpose of this survey.

ACME
BOOKBINDING CO., INC.
OCT 8 1990